

Final Completion Report

Assessment of Recreational Halibut Harvest in Alaska

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Project Summary

The purpose of this project was to monitor the composition of harvest and fishery characteristics for the recreational halibut fisheries in Southeast and Southcentral Alaska during the 2003-2007 fishing seasons. The specific objectives were to estimate the average weight of harvested fish, total weight of the recreational harvest, length composition of harvested fish, and the spatial distribution of fishing effort and harvest. This information is used by federal fishery managers to assess the halibut stock, set fishery quotas, establish regulations to provide for optimum yield, and evaluate regulatory options to address allocation conflicts between user groups.

The recreational harvest of halibut was sampled at the primary boat harbors, public launches, and beach launching areas in Southeast and Southcentral Alaska. Harvested halibut were measured and charter operators and unguided anglers were interviewed to obtain information on the amount of fishing effort, numbers of halibut harvested, and locations of fishing. The average weight and total weight of the harvest were estimated using length data combined with mail survey estimates of the number of fish harvested. Data from vessel-trip interviews were used to estimate the geographic distribution of fishing effort and harvest of halibut.

Estimates of mean net weight for 2003-2006 ranged from 19.1-20.7 lb for charter halibut and 14.0-18.8 lb for private halibut in Area 2C. Estimated mean weight in Area 3A over the same period ranged from 17.8-20.7 lb in the charter harvest and 14.4-17.3 lb in the private harvest. Estimated harvest biomass in Area 2C ranged from 2.258-2.937 M lb during the years 2003-2006. Charter harvests varied from 1.412-1.952 M lb, and private harvests varied from 0.723-1.187 M lb. The Area 2C charter fishery accounted for 60-71% of the harvest over the period. Total recreational harvest biomass in Area 3A ranged from 5.337-5.672 M lb through 2006. Annual harvests in the charter fishery were fairly constant, in the range 3.382-3.689 M lb, and made up 62-69% of the total harvest. Private fishery harvests over the period ranged from 1.674-2.046 M lb. The majority of the halibut harvested harvest in both regulatory areas was generally in the range 60-110 cm. Female halibut made up 69-79% of the Area 3A harvest by year. There were differences in the spatial distribution of the charter and private harvests at most ports studies. Charter harvest tended to be less dispersed than the private harvest in Area 2C.

Purpose of Project

The marine waters of Southeast and Southcentral Alaska support the largest recreational fishery for Pacific halibut *Hippoglossus stenolepis*. Recreational halibut harvest statewide grew from about 10,000 fish statewide in the mid-1970s (Skud 1975) to a high of about 500,000 fish in 2005 (Jennings et al. *In prep.*). Virtually all of the recreational harvest in Alaska is from the Southeast and Southcentral regions. The sport halibut harvest in these two areas represented 73% by weight of the entire Pacific coastwide sport harvest in 2006. The recreational halibut fishery and related tourism are important to the economy of coastal communities, providing significant seasonal employment and income.

Growth in the sport harvest and changes in the halibut stock have led to allocation conflicts between sport and commercial users. Changes have been proposed for management of the guided (charter) sport fishery in Alaska. Although the International Pacific Halibut Commission (IPHC) and North Pacific Fishery Management Council (NPFMC) manage the halibut stock, the State of Alaska, Department of Fish and Game (ADF&G), has taken the lead in collecting data from the recreational halibut fishery in conjunction with sampling for state-managed species. This information that ADF&G provides is used by the IPHC for annual stock assessments, formulation of harvest strategies, and quota recommendations.

Allocation issues underscore the need for data collection, particularly from the charter fishery. In August of 2003 the National Marine Fisheries Service (NMFS) issued a final rule to implement a guideline harvest level (GHL) for charter halibut fisheries in Southeast and Southcentral Alaska (IPHC Regulatory Areas 2C and 3A respectively). In 2004 the charter fisheries in Southeast and Southcentral exceeded their respective GHLs. In response, the NPFMC initiated an analysis of proposed management measures to

reduce charter harvest in both areas in October 2005. The NPFMC also appointed a committee to recommend alternatives to amend the GHL regulations. In December 2005 the NPFMC voted to rescind its April 2001 motion to incorporate charter vessels into the existing commercial IFQ program, and is now considering a suite of options for managing the charter fishery in these regulatory areas. The final estimates of halibut harvest for 2005 and 2006 also exceeded the GHLs in Area 2C and Area 3A, fueling continued development of a regulatory options including allocation between the charter and commercial fisheries, leasing of commercial individual fishery quotas, and compensated reallocation between sectors. In April 2007 the NPFMC passed a motion to implement a moratorium on new entry into charter halibut fisheries in areas 2C and 3A using a control date of December 9, 2005. The moratorium is expected to be implemented by 2009 or 2010.

There is an ongoing need for annual estimates of average weight for both the charter and non-charter harvests in each regulatory area. Collection of biological data from the halibut and other important marine fisheries will help ensure that management and allocation decisions are based on the best available information. This federal grant provided for ADF&G sampling at Gustavus, Elfin Cove, Petersburg, and Wrangell (Area 2C), and Yakutat (Area 3A), and augmented sampling at Ketchikan and Sitka (Area 2C) and Seward (Area 3A). Obtaining additional data from these locations that would not otherwise have been collected resulted in more accurate and precise data from the sport fishery.

The goal of this project was to monitor the composition and harvest and fishery characteristics for the principal recreational halibut fisheries in IPHC Regulatory Area 2C (Southeast Alaska excluding Yakutat) and Area 3A (Southcentral Alaska plus Yakutat).

Specific objectives for the 2003-2007 fishing seasons were to estimate:

1. The mean net weight and harvest biomass of halibut harvested by both chartered and non-chartered anglers in each port surveyed.
2. The length composition of halibut landed at each port.
3. The sex composition of halibut landed at each port in Southcentral Alaska (2003-2006 only).
4. The geographic distribution of bottomfishing effort and halibut harvest by both chartered and non-chartered anglers interviewed by port.

Approach

Sampling Design and Data Collection

The State of Alaska estimates the number of halibut harvested through the ADF&G Sport Fish Survey, or Statewide Harvest Survey (SWHS). Although the SWHS is funded separately by the state, the results of that survey were linked with data from this project to achieve the objectives. The SWHS is a mail survey that has been conducted annually since 1977. Survey questionnaires are mailed to a stratified, random sample of households containing licensed anglers (or anglers with a license substitute) to estimate the numbers of fish caught and harvested by species on a statewide basis (for example, see Jennings et al. 2007). Repeated mailings are used to correct for non-response bias. Estimates of harvest, in numbers of fish, were provided for charter and non-charter fisheries in each of seven survey areas (SWHS areas) in IPHC Area 2C (Figure 1) and seven SWHS areas in IPHC Area 3A (Figure 2). These estimates were provided by ADF&G, Sport Fish Division, Research and Technical Services staff in Anchorage and are unpublished. Total harvest estimates (charter and non-charter combined) for 2003 and 2004 are published in the Sport Fish Division report series (Jennings et al. 2006, 2007). Some of the SWHS areas in Area 3A were modified slightly from the original SWHS areas in order to align the areas represented by harvest estimates and sampling for biological characteristics. Although the Area 2C/3A boundary line does not correspond with the SWHS Area G boundary line (Figure 1), very little of the SWHS Area G harvest occurs in Area 3A and all of it was attributed to Area 2C. Likewise, a small amount of Area 3A harvest (< 200 fish) from waters adjacent to the Alaska Peninsula is attributed to Area 3B each year.

This project provided for collection of data on the sizes of fish harvested in the primary ports representing each of the SWHS areas (Figure 1, Table 1). No sampling was conducted in Area F (Haines-Skagway) because the fishery there is quite small. Juneau average weight data were substituted for Area F in all years. The size data (average weight, length composition) from each port were combined with SWHS data to estimate the Area 2C-wide and Area 3A-wide average weight and size composition. Numerous technicians sampled halibut harvested in the recreational fishery and conducted boat-trip interviews at the primary boat harbors, public launches, and beach launching areas throughout Areas 2C and 3A.

Southeast Alaska:

The halibut data collection program was implemented as part of the existing ADF&G creel survey program for salmonids and bottomfish at Ketchikan, Juneau, and Sitka in Southeast Alaska. Catch sampling of halibut occurred on stratified random sampling days, with the following strata: weekday/weekend, time of day (usually morning or afternoon), and fishery exit point (i.e., dock or boat launch site). Bottomfish and salmon sampling priority days were designated systematically during the season to provide guidance on sampling priorities between bottomfish and salmonids if sampling decisions had to be made during a busy period of a day. In addition, an extra biological sampler(s) was hired at the three creel survey ports to increase sample sizes of both bottomfish (halibut, lingcod and rockfish) and salmon. Halibut and salmon sampling was also conducted at the ports of Craig, Klawock, Petersburg, Wrangell, Elfin Cove, Gustavus, and Yakutat (Area 3A). Sampling of halibut was generally conducted from late April to mid-September at the creel survey ports of Ketchikan, Juneau, and Sitka, while at the sampling at some of the other ports starting several weeks later and/or ending several weeks earlier.

The following information was recorded during creel survey interviews: port sampled, date, dock/boat launch sampled, creel technician identification number, interview number, number of rods fished, number of anglers fishing (beginning in 2005), hours fished, trip type (charter or private), number of days in trip, primary statistical area fished, target category (bottomfish [might be specified as halibut, lingcod, or rockfish], salmon, or a trip with both targeted), and numbers of halibut (and other species) kept and released. If anglers targeted both bottomfish and salmon, then one interview line was used to record the bottomfish effort and catch, and a second interview line was used to record the salmon fishing effort and catch. In 2007 only, the numbers of halibut released were recorded by size class (< 32 in or ≥ 32 in) and hook type (circle hook or “other” hook type). The same statistical areas were used as for logbooks. Charter skippers were interviewed for all charter trips to help ensure that the most accurate information was obtained. Logbook numbers and boat names were recorded for all charter vessels interviewed. Beginning in 2006, whenever possible, technicians counted and verified the reported numbers of fish harvested for later comparison to logbook data.

Fork length of halibut was recorded to the nearest 0.5 cm. No sex information or otolith samples were collected from measured halibut. All halibut measurements were coded to indicate whether the fish were caught by charter or private anglers, the statistical area of capture, and whether they were from whole fish or carcasses. Sample size goals were established for each user group and port using optimum allocation formulae for stratified sampling (Thompson 1992) to meet the desired precision of the mean weight estimates ($\pm 10\%$ with 90% confidence).

The practice of anglers cleaning halibut at sea posed a challenge for estimation of average weight. Before 2007 anglers were allowed to clean fish at sea and dispose of the carcasses before coming ashore, as long as it was done in a manner that did not prevent determination of the number of fish caught. As a result, it was quite common in certain Southeast ports, specifically Sitka, for a large portion of the catch not to be available for sampling when the boat-party was intercepted. Effective June 1, 2007, new NMFS regulations prohibited charter anglers only from cleaning at sea unless the carcass of the fish were retained until the fish were landed. This regulation was put into place in conjunction with a 32-inch maximum size limit on at least one of the fish in the daily bag limit of charter anglers. Throughout the

duration of this report, technicians were instructed to measure halibut from a vessel only if all of the fish (or intact carcasses) were available to be sampled.

All data were recorded in the field on weather-resistant, machine-readable Mark Sense forms. Forms were scanned and converted to digital format as the season progressed. Efforts were made to ensure that data collection procedures are standardized throughout the region. Technicians were supplied with the project operational plan that included a creel technician manual outlining all sampling and data recording procedures. Nearly all new creel survey technicians were provided with at least a 2-day onsite training session at the beginning of the season with either their crew leader or project supervisor. Feedback on problems with interview and biological sampling data forms were provided to creel technicians throughout the season.

Southcentral Alaska:

Halibut data collection was integrated with the existing catch sampling programs at Kodiak, Homer, Deep Creek/Anchor Point, Seward, Whittier, and Valdez. Biological data were collected three days per week and interviews were conducted two days per week at Homer, Deep Creek/Anchor Point, Seward, and Valdez. Biological and interview days were chosen at random such that each type was distributed proportionally among weekends and weekdays to minimize bias due to differences in user group composition. Interview and biological sampling effort were distributed between Deep Creek and Anchor Point proportional to harvest so those data could be pooled to represent the Central Cook Inlet (CCI) SWHS area. At all other ports the interviews and biological sampling were conducted concurrently on five randomly selected days per week. The sampling season generally began in mid-May at Homer and Deep Creek/Anchor Point, and in late May or early June at other ports. Sampling extended through the end of August or early September, depending on port and year.

Technicians attempted to obtain interviews for all boats on which halibut or groundfish were targeted or caught. Angler parties that targeted salmon and didn't catch any halibut or groundfish were not interviewed. The following information was recorded during interviews: location sampled, time of interview, duration of trip in days, whether the trip is the first or second of the day (to facilitate logbook comparisons), total number of angler-days of fishing effort, hours fished, trip type (charter or private), primary statistical area fished, target category (several codes), and numbers of halibut (and other species) kept and released. Numbers of halibut cleaned at sea were recorded and monitored as a potential source of bias, but were also used in calculation of the charter mean weight for Homer (see Analysis section). The numbers of halibut released were recorded by hook type (circle hook or "other" hook type) in 2007 only. As in Area 2C, charter skippers were interviewed for all charter trips to help ensure that the most accurate information was obtained. Logbook numbers and boat names were recorded for all charter vessel interviews.

As in Southeast Alaska, samplers commonly encountered boats with a portion of their harvest already cleaned and carcasses disposed of at sea. This would not be expected to cause bias unless the length composition of these fish differed from the landed fish. Homer typically was the port with the highest proportion of charter-caught fish cleaned at sea (22-49% in recent years), and some charter operators there tend to clean smaller fish at sea and bring the larger fish back to the docks. Therefore, sampling at Homer included procedures for sampling fish cleaned at sea. A list of vessels that cleaned at sea was compiled, and a vessel was selected at random each day and provided with tubs in which to retain the carcasses of fish cleaned at sea. Average weight for the Homer charter fleet was then calculated as a stratified mean with stratum weights determined from interview data. Technicians at all other ports were instructed not to sample any portion of the catch from a vessel unless all of the fish (or intact carcasses) were available for measurement.

Fork length of halibut was recorded to the nearest centimeter. Sex was determined based on direct examination of gonads, and the left otolith was removed and forwarded to the IPHC for age determination. Sample size goals for length measurements were set based on the standard sample size

equations for estimating a population mean (Thompson 1992) to achieve the target precision of $\pm 10\%$ (with $\alpha = 0.10$).

Prior to 2007 all data were recorded on weather-resistant, machine-readable Mark Sense forms. Forms were scanned and converted to digital format at the end of the season. In 2007 interview data were entered directly into field computers with a custom data input application with error trapping and lookup tables. Biological data were entered directly into protected Excel spreadsheets with data validation checks.

Efforts were made to ensure that data collection procedures were standardized throughout the region. Technicians are supplied with the project operational plan and a separate Field Procedure Manual that provides background management and biological information, in-depth descriptions of sampling procedures, and detailed administrative information. All technicians received 2-3 days of hands-on training with periodic visits from the supervisor, and data quality was monitored inseason.

Analysis

Mean net weight (headed and gutted) was estimated from fork length measurements using the IPHC length-weight relationship. Mean net weight was estimated for each user group (g) in each SWHS area (a) (Objective 1) as the mean of the predicted weights over all n_{ga} sampled fish (Nielsen and Schoch 1980):

$$\bar{w}_{ga} = \frac{\sum_{k=1}^{n_{ga}} \alpha L_{gak}^{\beta}}{n_{ga}}, \quad (1)$$

where L_{gak} = the observed length of fish k (to the nearest cm), $\alpha = 6.921 \times 10^{-6}$ for net weight in pounds, and $\beta = 3.24$ (Clark 1992). Variances of the mean predicted weights were estimated using standard normal procedures but did not incorporate variation inherent in the length-weight relationship. Pounds net weight (headed and gutted) is the standard unit used by federal halibut management agencies.

The mean net weight of charter-caught fish in Lower Cook Inlet was obtained using a stratified estimator to account for the different sizes of fish cleaned at sea and cleaned in port at Homer in 2004-2007. Halibut cleaned in port were significantly larger than fish cleaned at sea at Homer each of these years. There was no difference in the mean weights in 2003 ($t = -0.11$, $P = 0.92$, $df = 268$). Therefore, the mean weights for charter-caught halibut in Lower Cook Inlet (\hat{w}_C) were estimated for 2004-2007 by:

$$\begin{aligned} \hat{w}_C &= (\bar{w}_{CS} \hat{p}_{CS}) + (\bar{w}_{CP} \hat{p}_{CP}), \\ &= (\bar{w}_{CS} \hat{p}_{CS}) + (\bar{w}_{CP} (1 - \hat{p}_{CS})), \\ &= (\bar{w}_{CS} \hat{p}_{CS}) + \bar{w}_{CP} - (\bar{w}_{CP} \hat{p}_{CS}), \end{aligned} \quad (2)$$

where

\bar{w}_{CS} = the sample mean weight of charter-caught fish cleaned at sea,

\hat{p}_{CS} = the estimated proportion of charter-caught fish cleaned at sea,

\bar{w}_{CP} = the sample mean weight of charter-caught fish cleaned in port, and

\hat{p}_{CP} = the estimated proportion of charter-caught fish cleaned in port.

The proportion \hat{p}_{CS} was estimated using completed-trip interview data as

$$\hat{p}_{CS} = \frac{n_{CS}}{n}, \text{ and} \quad (3)$$

$$v(\hat{p}_{CS}) = \frac{\hat{p}_{CS}(1-\hat{p}_{CS})}{n-1}, \quad (4)$$

where n_{CS} the number of halibut cleaned at sea on interviewed charter vessels, and n = the number of halibut kept by interviewed charter vessels. The variance of the mean weight for charter-caught halibut was estimated by (Goodman 1960):

$$\begin{aligned} v(\hat{\bar{w}}_C) &= v(\bar{w}_{CS}\hat{p}_{CS}) + v(\bar{w}_{CP}) + v(\bar{w}_{CP}\hat{p}_{CS}) - 2\text{Cov}(\bar{w}_{CS}\hat{p}_{CS}, \bar{w}_{CP}\hat{p}_{CS}) \\ &\quad - 2\text{Cov}(\bar{w}_{CP}, \bar{w}_{CP}\hat{p}_{CS}) \end{aligned} \quad (5)$$

where:

$$\begin{aligned} v(\bar{w}_{CS}\hat{p}_{CS}) &= [\bar{w}_{CS}^2 v(\hat{p}_{CS}) + v(\bar{w}_{CS})\hat{p}_{CS}^2 - v(\bar{w}_{CS})v(\hat{p}_{CS})], \\ v(\bar{w}_{CP}\hat{p}_{CS}) &= [\bar{w}_{CP}^2 v(\hat{p}_{CS}) + v(\bar{w}_{CP})\hat{p}_{CP}^2 - v(\bar{w}_{CP})v(\hat{p}_{CS})], \\ \text{Cov}(\bar{w}_{CS}\hat{p}_{CS}, \bar{w}_{CP}\hat{p}_{CS}) &= \bar{w}_{CS}\bar{w}_{CP}v(\hat{p}_{CS}), \text{ and} \\ \text{Cov}(\bar{w}_{CP}, \bar{w}_{CP}\hat{p}_{CS}) &= \hat{p}_{CS}\hat{v}(\bar{w}_{CP}). \end{aligned}$$

Harvest biomass B was estimated for each user group g in each SWHS area a (Objective 1) as:

$$\hat{B}_{ga} = \hat{H}_{ga}\hat{\bar{w}}_{ga}, \quad (6)$$

where \hat{H}_{ga} = the Statewide Harvest Survey estimate of number of halibut harvested, and $\hat{\bar{w}}_{ga}$ = the estimated mean weight of halibut harvested by user group g in area a . Harvest biomass could not yet be calculated for 2007 because the SWHS estimates are not available until September of the year following harvest (September 2008).

The variance of the estimated harvest biomass was estimated as (Goodman 1960):

$$v(\hat{B}_{ga}) = \hat{H}_{ga}^2 v(\hat{\bar{w}}_{ga}) + v(\hat{H}_{ga})\hat{\bar{w}}_{ga}^2 - v(H_{ga})v(\hat{\bar{w}}_{ga}). \quad (7)$$

Harvest biomass point estimates are summed over SWHS areas to estimate harvest biomass by user group for each IPHC Regulatory Area (2C or 3A). The average weight for each user group g and IPHC Regulatory Area was simply the total harvest in pounds divided by the total harvest in numbers of fish:

$$\hat{\bar{w}}_g = \sum_a \hat{B}_{ga} / \sum_a \hat{H}_{ga}, \quad (8)$$

Variance of the average weight for each user group was obtained with Markov-Chain Monte Carlo methods using WinBUGS software (Gilks et al., 1994). Normal sampling error was assumed for average weights and harvest estimates.

Length composition (Objective 2) was estimated as the simple proportion \hat{p} of harvest in each 10-cm length class. Standard errors were calculated from the variance of the proportions, ignoring the finite population correction factor $(N-n)/N$ because sample sizes were small relative to the harvest:

$$SE(\hat{p}) = \sqrt{\frac{\hat{p}(1-\hat{p})}{n-1}}. \quad (9)$$

Sex composition was estimated for Southcentral Alaska ports in 2003-2006 only (Objective 3) as the proportion female using a stratified estimator:

$$\hat{p}_{i_{ST}} = \sum_g \hat{h}_g \hat{p}_{ig} \quad (10)$$

where

\hat{h}_g = the estimated proportion of the SWHS area harvest taken by user group g (stratum weight),

\hat{p}_{ig} = the estimated proportion of harvest (numbers of fish) of each sex i taken by user group g .

The stratum weights were estimated using harvest estimates from the SWHS. Because the estimates are based on very large samples, the variance was considered negligible and the stratum weights were considered constants. The standard errors of the proportions were estimated by:

$$SE(\hat{p}_{i_{ST}}) = \sqrt{\sum_g \hat{h}_g^2 v(\hat{p}_{ig})}. \quad (11)$$

Finally, the spatial distribution of bottomfishing effort and halibut harvest (Objective 4) were estimated separately for charter and private fisheries as the proportion of bottomfishing effort or halibut harvest (number of fish) in each ADF&G statistical area. Effort was included in the estimate if the target species was halibut, or any other species of bottomfish, or any bottomfish species in connection with salmon. For Area 2C and Yakutat, effort was measured in angler-hours because it was collected in a manner that allows separation of effort for halibut, bottomfish, or bottomfish and salmon. Angler-days were used as the unit of effort for all Area 3A ports except Yakutat. Although the hours spent fishing were recorded for each boat trip, they were not separable between species. An angler-day was counted in a statistical area if an angler fished any portion of a day in that area. Estimates of the spatial distribution of halibut used all interviews, regardless of the target species. Standard errors of the proportions were calculated using equation 9. Estimates were computed for all ports each year, except that no spatial data was collected in Yakutat in 2003.

The underlying structure of statistical areas differs between Southeast and Southcentral Alaska. Southeast areas are modified from the state salmon statistical area structure (figures 3 and 4), because the pre-existing marine creel survey program was set up largely to track Chinook and coho salmon harvest. In contrast, groundfish/shellfish statistical areas (based on latitude and longitude) are used in Southcentral Alaska (figures 5 and 6) because the sampling program was set up to monitor mostly groundfish.

Project Personnel

Following is a list of ADF&G personnel involved in carrying out the project activities and their respective duties.

Region	Name	Duties and Responsibilities
Southeast	Michael Jaenicke	Southeast Region project leader. Responsible for planning, budgeting, data analysis, and assisting in writing the progress reports.
	Diana Tersteeg	Assistant project leader for northern Southeast Region. Responsible for hiring, training, and supervision of technicians, data control and validation.
	Heather Riggs	Assistant to Diana Tersteeg. Provide help with hiring, training, and supervision of technicians, data control and validation for the port of Sitka.
	Kathleen Wendt	Assistant project leader for southern Southeast Region. Responsible for hiring, training, and supervision of technicians, data control and validation.
	Mike Wood	Assistant to Kathleen Wendt. Provide help with hiring, training, and supervision of technicians, data control and validation for southern Southeast Region.
	Fish and Wildlife Technicians (99)	All aspects of data collection, including interviews and length measurements.
Southcentral	Scott Meyer	Southcentral Region project leader. Responsible for planning, budgeting, data analysis, and writing the progress reports.
	Charlie Stock	Assistant project leader. Responsible for hiring and supervision of technicians, data control and validation.
	Fish and Wildlife Technicians (21)	All aspects of data collection, including interviews and length measurements.
Statewide	Steve Fleischman	Provided biometric support and review of planning, assisted with data analysis.
	Becky Nelson, Clay Kent	Grant administrative support
	Rob Bentz, Douglas Vincent-Lang, Robert Clark	Project overview, technical guidance

Results, Evaluation and Conclusions

Results

All objectives of the project were achieved each year. Although data collected during the 2003 fishing season before July 1 was technically not covered by this grant, all of the 2003 data and complete season estimates are covered in this report.

Mean Net Weight and Harvest Biomass (Objective 1):

Estimates of mean net weight were based on sample sizes ranging from 4,834-9,277 for charter fish and 2,308-3,901 for private fish each year in Area 2C (Table 2). Mean net weight in Area 2C ranged from 19.1-20.7 lb for charter halibut (SE = 0.5-0.6 lb) and 14.0-18.8 lb for private halibut (SE = 0.3-0.5 lb). Preliminary estimates of mean weight for 2007, based on projected numbers of fish harvested in each SWHS area (not shown in this report), were 17.0 lb for the charter harvest and 16.3 lb for the private

harvest. Glacier Bay usually accounted for the largest fish in both the charter and private sectors, with average weights ranging up to 37.3 lb for the charter harvest. The Prince of Wales area fishery, sampled at Craig and Klawock, consistently had the lowest mean weight, reaching as low as 9.7 lb in the 2006 charter harvest and 10.7 lb in the private harvest in 2006 and 2007. The overall (charter and private) Area 2C mean weight was in the range 17.2-19.9 lb (SE = 0.4 lb each year) for the years 2003-2006.

Sample sizes in Area 3A ranged from 3,771-5,089 for charter fish and 1,683-2,410 for private fish (Table 3). Mean net weight in Area 3A from 2003 to 2006 ranged from 17.8-20.7 lb in the charter harvest (SE = 0.3 lb each year) and 14.4-17.3 lb in the private harvest (SE = 0.4-0.5 lb). Preliminary estimates of mean weight for 2007, based on projected numbers of fish harvested in each SWHS area, were 17.1 lb for the charter harvest and 13.7 lb for the private harvest. The highest mean weights in the charter harvest were consistently at Yakutat, in the range 33.3-41.7 lb. The lowest mean weights were typically in the Central Cook Inlet (Deep Creek and Anchor Point) and North Gulf Coast (Seward) fisheries. For most areas, the charter mean weights exceeded the private mean weights more often than not. At Whittier, however, the private mean weight was higher than the charter mean in 2003, 2005, and 2006. The overall Area 3A mean weight was in the range 16.7-19.3 lb (SE = 0.2-0.3) for the 2003-2006 seasons.

Estimates of mean weight for each user group and IPHC area were relatively precise. Relative precision (defined as $1.96 \cdot SE / \text{mean}$) of charter mean weights ranged from 5-6% in Area 2C and 3-4% in Area 3A. Relative precision of private mean weights ranged from 4-6% in Area 2C and 5-7% in Area 3A.

Estimated harvest biomass in Area 2C ranged from 2.258-2.937 M lb during the years 2003-2006 (Table 4). Charter harvests varied from 1.412-1.952 M lb, and private harvests varied from 0.723-1.187 M lb. The charter harvest made up 60-71% of the total removals from 2003 to 2006. The Sitka area accounted for the largest portion of the charter harvest each year (up to 33,159 fish or 0.840 M lb). Estimates of private harvest biomass were quite variable among the ports from year to year, with Juneau of Glacier Bay typically accounting for the greatest share of harvest. The Haines/Skagway area consistently had the smallest charter and private harvests each year.

Total recreational harvest biomass in Area 3A ranged from 5.337-5.672 M lb through 2006 (Table 5). Annual harvests in the charter fishery ranged from 3.382-3.689 M lb and made up 62-69% of the total removals. Harvest biomass was essentially constant during the years 2004-2006, in the range 3.664-3.689 M lb. The private harvest dropped from 2.046 M lb in 2003 to 1.674 M lb in 2006. The Lower Cook Inlet area fishery accounted for the largest charter and private harvests each year, and the Central and Lower Cook Inlet fisheries together made up 61-63% of the charter harvest and 57-64% of the private harvest (by weight) among years in Area 3A.

Estimates of charter harvest biomass were more precise than estimates for the private fishery in both Area 2C and Area 3A. Relative precision of charter estimates ranged from 9-10% in Area 2C and from 5-6% in Area 3A. In contrast, relative precision of private harvest biomass ranged from 12-13% in Area 2C and 9-12% in Area 3A. The lower precision for the private fishery was due mostly to the combination of smaller sample sizes for estimation of mean weight and higher variances on the SWHS estimates of the number of fish harvested. This is expected given that the private fishery harvests fewer halibut than the charter sector.

Length Composition (Objective 2):

Length composition was estimated from annual sample sizes of 7,150-12,128 length measurements in Area 2C (Table 6) and 5,467-7,396 measurements in Area 3A (Table 7). Lengths of measured halibut ranged from 29-234 cm in Area 2C and from 37-224 cm in Area 3A across all years. The majority of the harvest in areas 2C and 3A was generally in the range 60-110 cm. Larger fish were more common some years in the Sitka and Glacier Bay fisheries in Area 2C (Table 6, Figure 7), and in the Eastern Prince William Sound and Yakutat fisheries in Area 3A (Table 7, Figure 8). The mode of the length frequency

distributions declined slightly (charter and private harvest combined) from 2003 to 2007 in most of the Area 2C fisheries (Figure 7) and Area 3A fisheries (Figure 8).

Sex Composition in Southcentral Alaska (Objective 3):

Estimates of sex composition in the Area 3A fishery were based on samples of 5,014-6,036 fish each year for which the sex and user group could be determined at the time of sampling (Table 8). The estimated proportion of female halibut in the harvest varied among ports, from 55-62% in the North Gulf Coast fishery up to 81-86% in the Central Cook Inlet fishery. The weighted proportion of females for Area 3A overall (excluding Yakutat) ranged from 69-79% during the years 2003-2006.

Geographic Distribution of Bottomfishing Effort and Halibut Harvest (Objective 4):

For Area 2C, the spatial distribution of effort was based on 4,259-5,571 vessel-trip interviews each year where the target species was halibut, bottomfish, or bottomfish and salmon. Effort and harvest at most ports was spread over a large number of statistical areas (Tables 9-10). Even so, at most ports the majority of effort or harvest came from a handful of areas. For example, statistical areas 104350 and 104400 accounted for 71-83% of the charter effort and 72-89% of the charter harvest at Craig. Although there was often overlap between the charter and private fleets, this was not always the case. One clear demonstration of this is at Sitka, where the Sitka Local Area Management Plan prohibits charter boats from fishing for halibut through most of the summer. Statistical areas 113412 and 113416, for example, accounted for 29-44% of the private effort (Table 9) and 25-50% of the private harvest (Table 10), but only accounted for 1-4% of the charter effort and harvest. The private effort and harvest were generally more dispersed than the charter effort and harvest; this is evident by the greater number of statistical areas with zero charter effort or harvest (tables 9 and 10).

Estimates of the spatial distribution of effort in Area 3A were based on 2,713-3,759 vessel-trip interviews each year. As in Area 2C, effort and harvest at most ports in Area 3A were spread out over many statistical areas (tables 11 and 12). Also consistent with Area 2C, there were a few statistical areas at each port that accounted for a large share of the harvest. This was especially true in the Central and Lower Cook Inlet fisheries. For example, statistical area 525931 accounted for 91-97% of the charter effort and harvest, 40-64% of the private effort, and 44-69% of the private harvest in the Central Cook Inlet fishery (tables 11 and 12). Again, there was also some separation of the charter and private effort and harvest. For example, statistical areas 515938 and 515939 accounted for 27-47% of the Central Cook Inlet private harvest but only 2-4% of the charter harvest. Similar differences in the distribution of effort and harvest are evident at most of the other ports.

Modifications to Original Objectives

Estimation of sex composition of the harvest in Southcentral Alaska was dropped as an objective in 2007. These data are not needed by the IPHC for stock assessment, or by the NPFMC for allocation or regulation of harvest. The IPHC stock assessment assumes that the sport fishery has the same catch at age by sex as the IPHC longline survey (Clark and Hare 2006). Even though estimates of sex composition were not calculated for 2007, the sex of each measured fish was recorded and estimates can be generated if the need arises.

Conclusions (including future work)

The accurate estimation of mean weight, length composition, and sex composition requires that the samples are representative of the sizes and sexes of fish harvested in each area. Sampling dates, locations, and hours of the day were chosen to maximize the percentage of harvest encountered by sampling, but incomplete temporal or spatial coverage is a potential source of bias. For example, funding was insufficient to allow sampling at remote lodges or communities in Southeast and Southcentral Alaska, or at many smaller road accessible access points. Although the sampled ports probably accounted for over

90% of the harvest in each region, incomplete coverage could be a source of bias if halibut landed at unsampled ports had a significantly different size or sex composition.

Another potential bias may have been introduced by cleaning and disposal of smaller halibut at sea, so that the fish returned to shore for sampling were larger on average than the total harvest. This was addressed by sampling the catch from a vessel only when the vessel's entire catch could be sampled, or by establishing specific procedures to deal with cleaning at sea (e.g., the procedures at Homer). This was less of an issue for sampling the charter harvest in 2007 because the new NMFS size limit regulations required that all fish or carcasses be landed whole. There were slight differences in size composition from 2006 to 2007 at most Area 2C ports, but it is not possible to distinguish between changes due to more complete sampling and changes due to implementation of the size limit.

This project provided support for the state's effort to gather statistics on this federally managed fishery, and allowed for expansion to ports that otherwise would not have been sampled. All objectives were achieved and mean weight and recreational harvest were estimated with adequate precision for assessment of the halibut stock and management of the sport fishery. Because this is a major fishery with substantial annual removals, there is a need for continuation of this monitoring program. In fact, this support was extended to FY08 under a new NOAA grant, NA07NMF4370168, with similar objectives.

The direction of future work is uncertain. The NPFMC is considering a suite of alternatives to address allocation between the charter and commercial sectors, and the objectives of future work will depend to some degree on the alternatives that are selected and implemented. There will, however, always be a basic need for size data from the recreational fishery to estimate the sport removals in pounds.

Estimates of the spatial distribution of effort and harvest are not immediately applicable to any particular needs for assessment or management, but they were obtained at practically no additional cost. These data may be summarized further in the future, along with spatial data on commercial and subsistence removals, in order to better understand whether, or to what degree or manner, the halibut stock is locally depleted by these fisheries.

Products and Publications

No journal articles or other published products were produced during the report period. Results of the work were instead disseminated to federal halibut regulatory agencies through a variety of means.

In October of each year 2004-2007, ADF&G (Meyer and Jaenicke) sent a letter to the IPHC presenting final estimates of mean weight and harvest biomass for charter and private recreational fisheries in areas 2C and 3A for the previous year. Each letter also contained estimates of mean weight and projections of harvest for the current year. Harvest projections were needed because SWHS harvest estimates are not typically available until September of the following year. Methods of projecting harvest varied by regulatory area and by year, and were described in each letter. ADF&G continues to work on improving the projection methods. ADF&G (Meyer) also sent a letter to the IPHC in December 2006 providing projections of the 2007 harvest (1-year ahead) using a variety of methods. Also in 2006, Southeast staff (Jaenicke and Tersteeg) provided length frequency estimates to the IPHC for their evaluation of the use of survey data as a surrogate for sport fishery data. ADF&G staff also attended each annual regulatory meeting of the IPHC to provide a brief oral report on the sport fishery estimates and answer questions relating to recreational fisheries in Alaska.

Several types of information were also provided to the NPFMC. Estimates of mean weight and harvest biomass were included directly in analyses of proposed alternatives for management of charter harvest in Area 2C (NPFMC 2007a) and Area 3A (NPFMC 2007b). Length composition estimates were also incorporated in the estimation of the impacts of various regulatory measures. In October 2007 two discussion papers were presented to the NPFMC, Scientific and Statistical Committee (SSC). The first was an overview of State of Alaska catch estimation procedures for halibut, rockfish, and sharks (Meyer et al 2007). This presentation discussed methods of generating estimates, including projections of the

current year harvest. The second was a paper on estimation of discard mortality in the area 2C and 3A recreational fisheries (Meyer 2007). This paper incorporated length data from the grant reporting period 2004-2007, data on hook use from 2007, and length data collected by ADF&G from 1995-2003.

Finally, ADF&G used harvest estimates and length composition data from 2006 to assist NMFS regulators with analyses of the impacts of various proposed regulations that were implemented in the Area 2C charter fishery in June 2007 (NMFS 2007).

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Key Words

Pacific halibut, *Hippoglossus stenolepis*, bottomfish, recreational fishery, sport fishery, guideline harvest level, Southeast Alaska, Southcentral Alaska, Area 2C, Area 3A, Kodiak, Cook Inlet, Seward, Whittier, Valdez, Yakutat, Prince William Sound, Glacier Bay, Elfin Cove, Gustavus, Haines, Skagway, Juneau, Sitka, Craig, Klawock, Prince of Wales Island, Petersburg, Wrangell, Ketchikan, estimation, mean, variance, standard error, effort, harvest, weight, length, sex, statistical area, spatial distribution, Alaska Department of Fish and Game, International Pacific Halibut Commission, North Pacific Fishery Management Council, National Marine Fisheries Service.

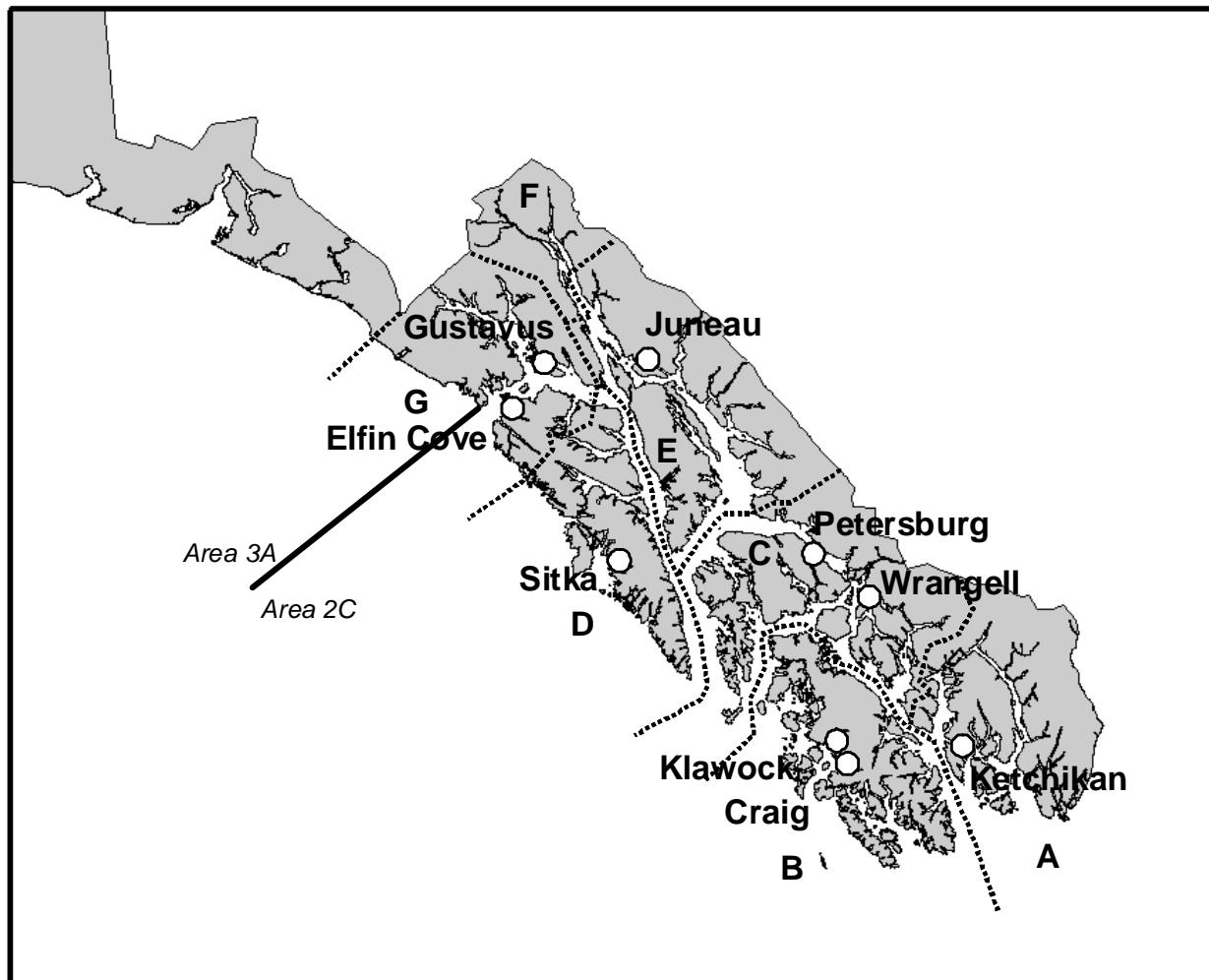


Figure 1. Statewide harvest survey areas, sampled ports, and IPHC area boundary, Southeast Alaska.

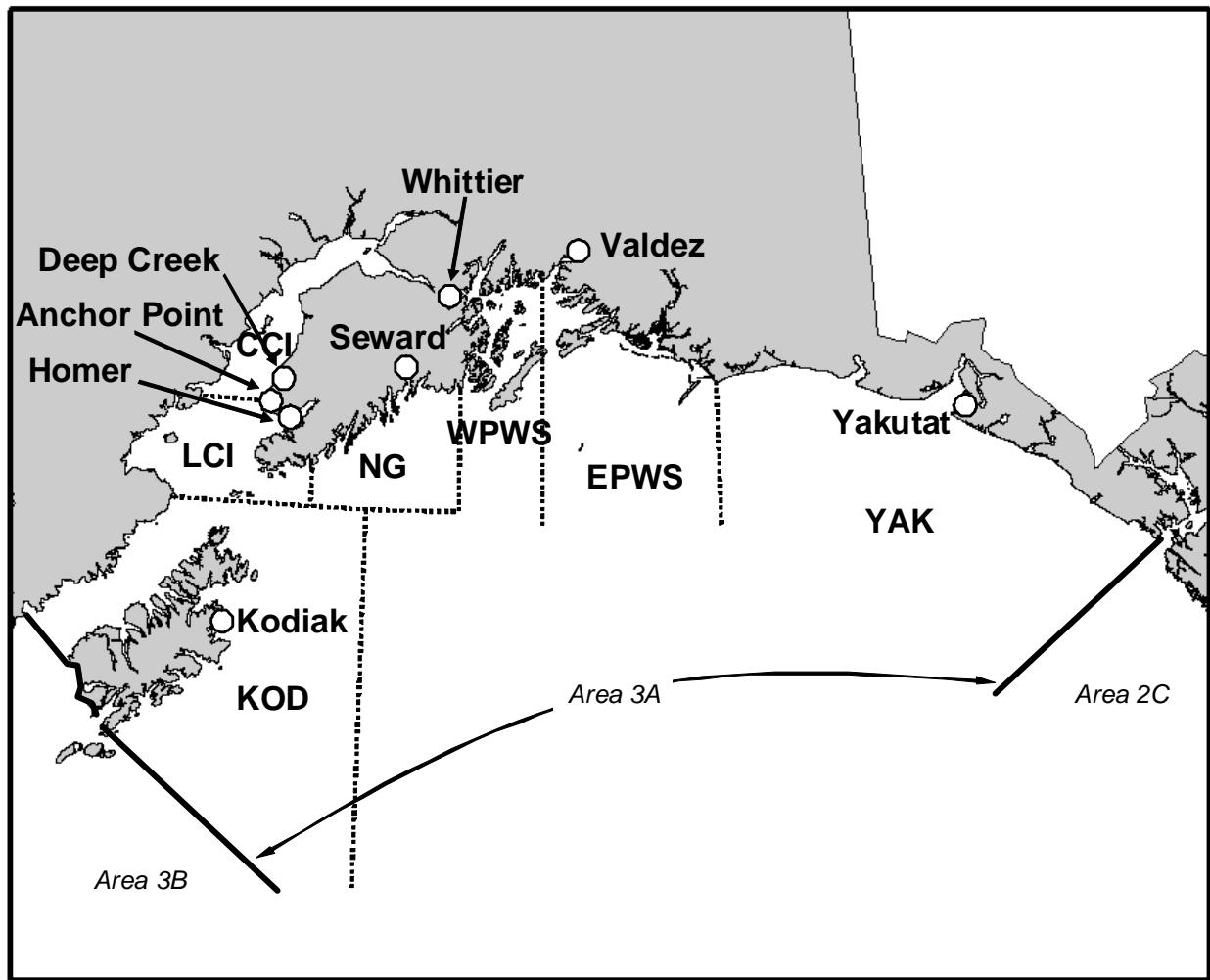


Figure 2. Statewide harvest survey areas, sampled ports, and IPHC area boundaries, Southcentral Alaska.

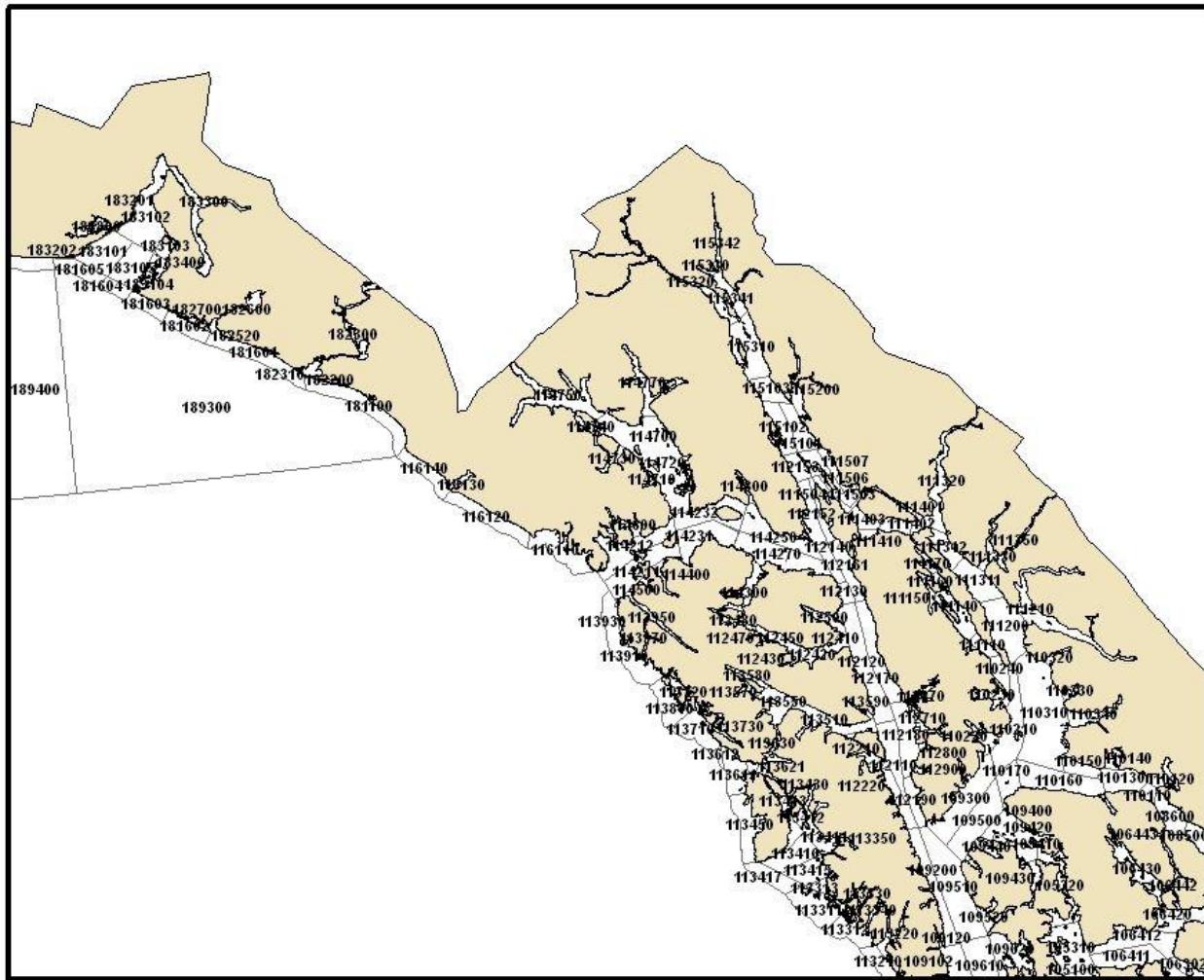


Figure 3. ADF&G statistical areas for recreational effort and halibut harvest in northern Southeast Alaska.

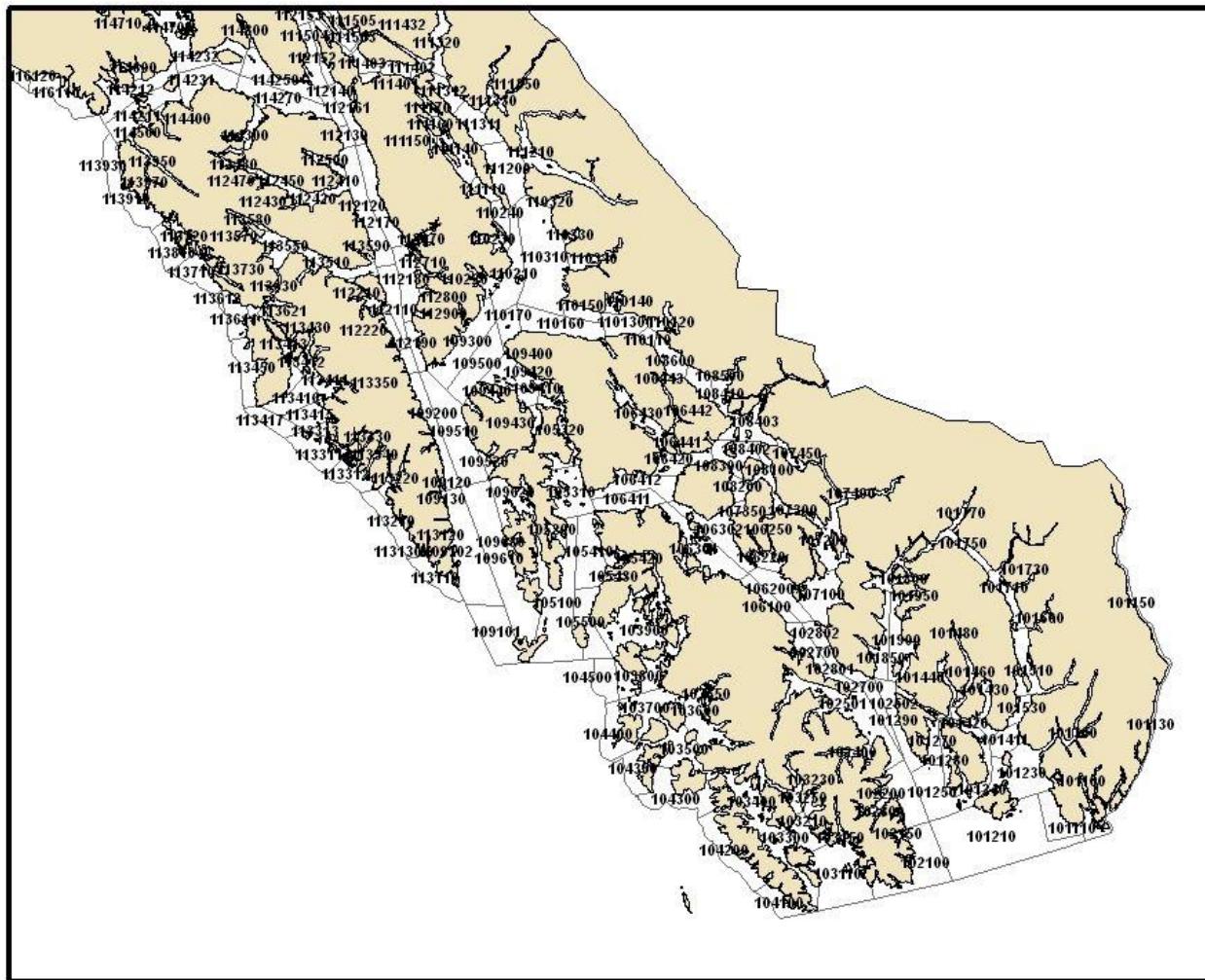


Figure 4. ADF&G statistical areas for recreational effort and halibut harvest in northern Southeast Alaska.

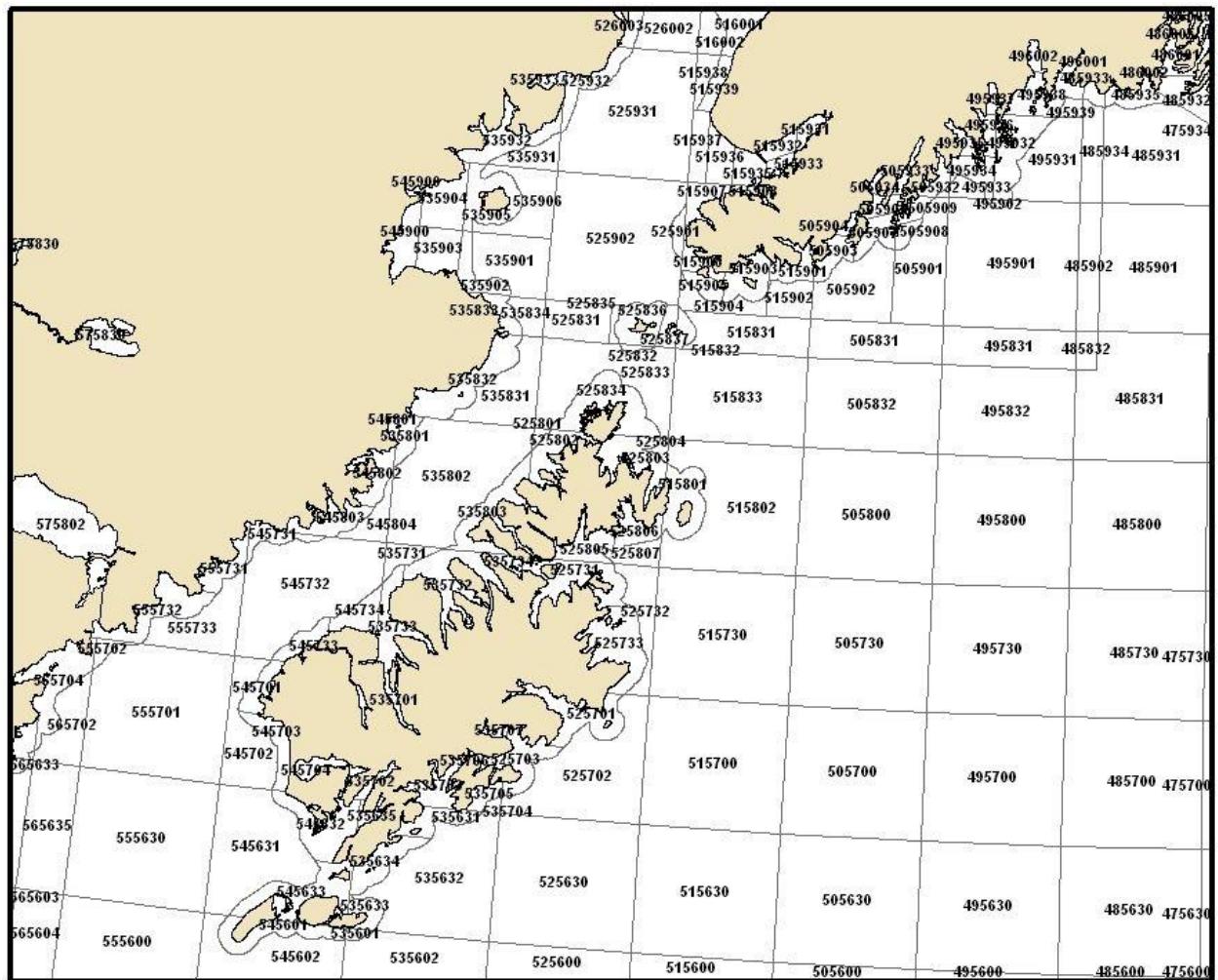


Figure 5. ADF&G statistical areas for recreational effort and halibut harvest in western Southcentral Alaska.

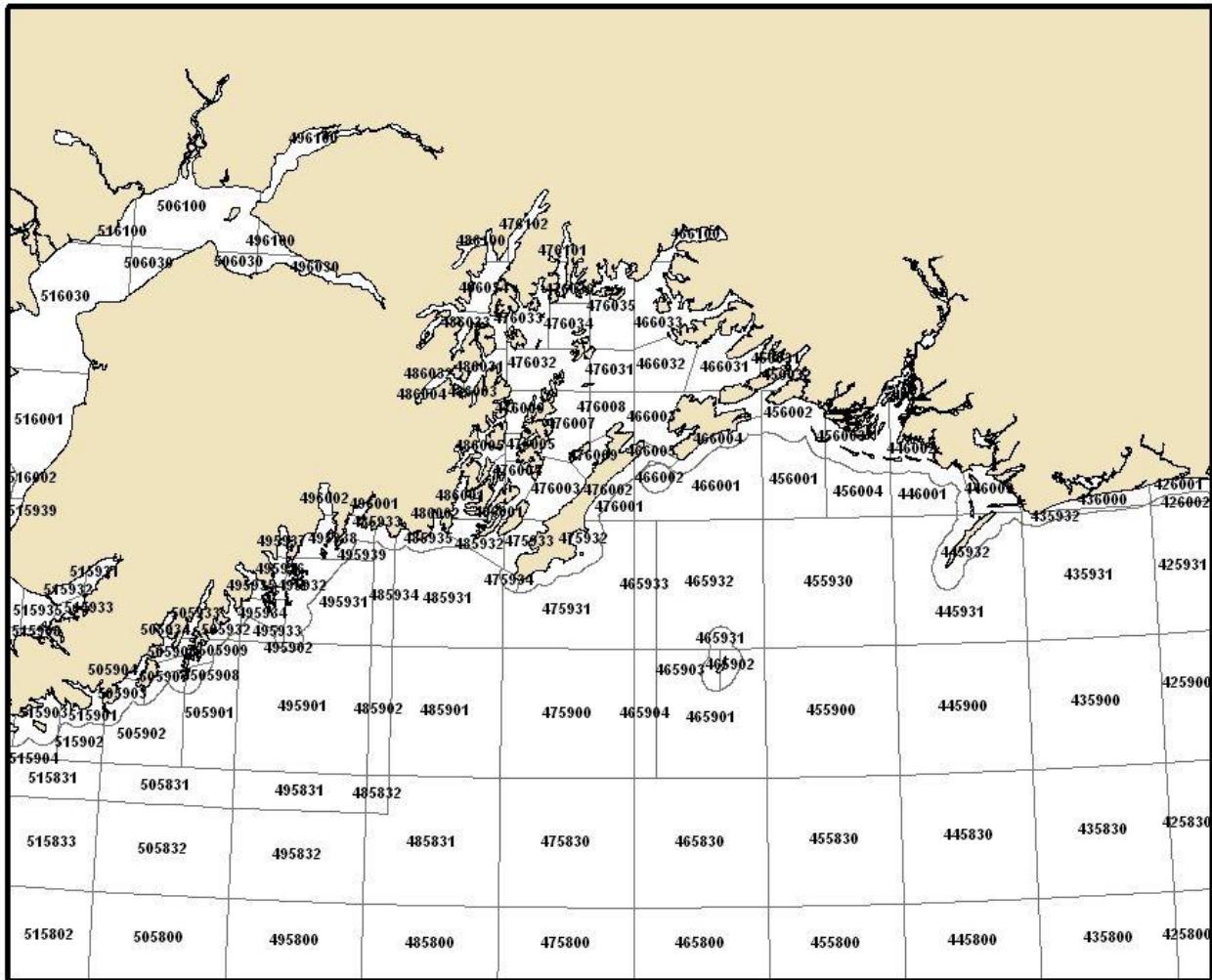


Figure 6. ADF&G statistical areas for recreational effort and halibut harvest in eastern Southcentral Alaska.

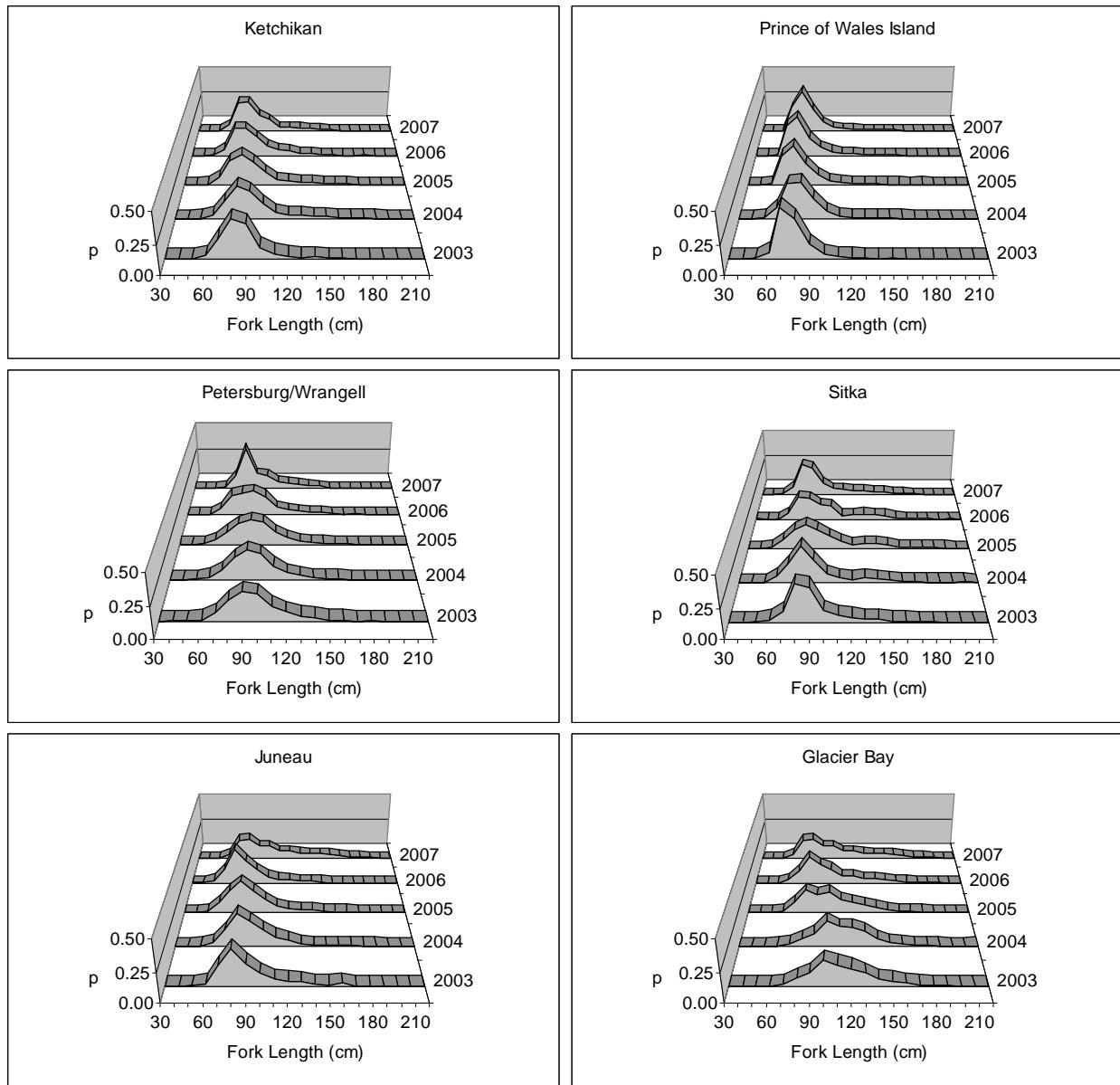


Figure 7. Changes in length composition of the Area 2C recreational harvest by SWHS area, 2003-2007.

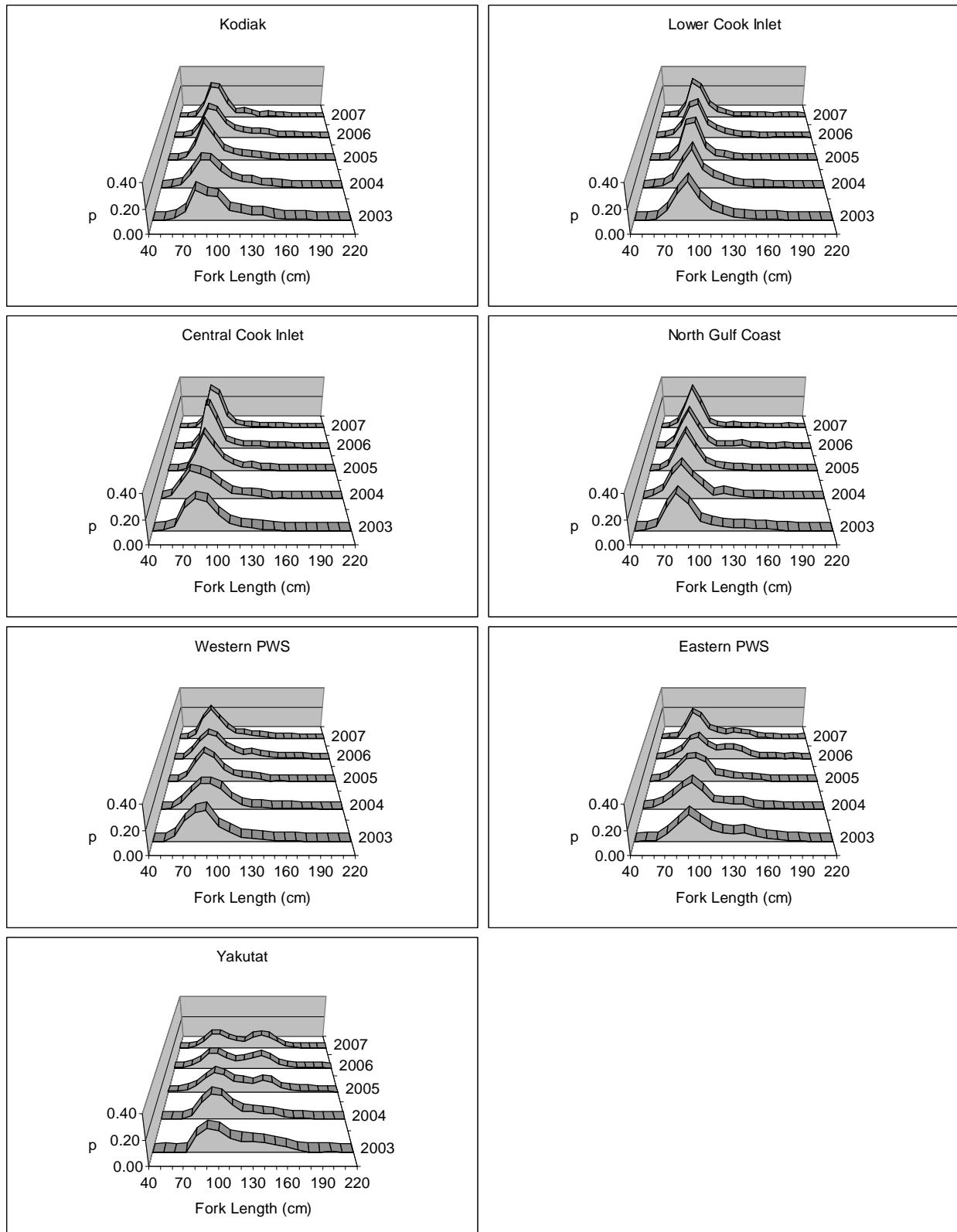


Figure 8. Changes in length composition of the Area 3A recreational harvest by SWHS area, 2003-2007.

Table 1. Statewide Harvest Survey (SWHS) areas and representative ports of sampling for recreational harvest in International Pacific Halibut Commission Regulatory Areas 2C and 3A, 2003-2007.

IPHC Area	SWHS Area	Description	Ports Sampled
2C	A	Ketchikan	Ketchikan
	B	Prince of Wales Island	Craig, Klawock
	C	Kake, Petersburg, Wrangell, Stikine	Petersburg, Wrangell
	D	Sitka	Sitka
	E	Juneau	Juneau
	F	Haines-Skagway	None ^a
	G	Glacier Bay	Elfin Cove, Gustavus
3A	H	Yakutat	Yakutat
	EPWS	Eastern Prince William Sound	Valdez
	WPWS	Western Prince William Sound	Whittier
	NG	North Gulf Coast	Seward
	LCI	Lower Cook Inlet	Homer
	CCI	Central Cook Inlet	Deep Creek and Anchor Point beaches
	KOD	Kodiak Island	Kodiak

^a – Data from Juneau were substituted for the Haines-Skagway SWHS area.

Table 2. Number of fish sampled (n), and estimated mean net weight (lb) and standard errors in the Area 2C recreational fishery by Statewide Harvest Survey (SWHS) area, 2003-2007. Final estimates of charter, private, and overall mean weight could not be calculated for 2007 because SWHS harvest estimates are not yet available.

User	SWHS Area	2003			2004			2005			2006			2007		
		n	Mean Wt	SE (Wt)	n	Mean Wt	SE (Wt)	n	Mean Wt	SE (Wt)	n	Mean Wt	SE (Wt)	n	Mean Wt	SE (Wt)
Charter	Ketchikan	169	17.1	1.5	489	20.7	0.9	355	18.2	0.9	736	18.9	0.8	364	15.5	0.8
	Prince of Wales Island	635	10.9	0.5	1,525	11.8	0.3	2,960	9.9	0.2	2,922	9.7	0.3	1,653	10.0	0.3
	Petersburg/Wrangell	674	25.8	0.8	814	22.3	0.5	776	25.3	0.6	518	26.4	1.1	1,026	22.0	0.7
	Sitka	1,193	20.3	0.6	550	21.9	1.2	537	24.4	1.3	492	25.3	1.4	2,822	18.5	0.4
	Juneau	111	18.1	1.3	264	17.5	0.9	182	16.0	0.6	194	14.3	0.9	411	12.1	0.6
	Glacier Bay	2,052	37.3	0.6	2,224	36.0	0.5	2,152	27.8	0.5	2,110	28.8	0.7	2,050	31.6	0.8
	Area 2C	4,834	19.1	0.5	5,866	20.7	0.6	6,962	19.1	0.5	6,972	19.9	0.6	9,277	NA ^a	NA ^a
Private	Ketchikan	264	14.9	1.0	466	16.8	0.9	388	13.8	0.7	919	13.5	0.5	757	15.7	0.7
	Prince of Wales Island	385	10.9	0.5	408	13.1	0.7	497	12.7	0.7	646	10.7	0.4	479	10.7	0.7
	Petersburg/Wrangell	554	20.3	0.9	607	18.1	0.6	768	15.7	0.6	863	15.4	0.6	939	17.0	0.5
	Sitka	189	14.0	1.0	135	17.3	2.1	136	15.1	1.5	159	16.8	1.6	112	15.2	1.6
	Juneau	596	19.1	0.9	521	19.2	0.9	1,107	14.6	0.4	559	12.9	0.6	1,122	12.5	0.4
	Glacier Bay	320	25.9	1.1	338	25.8	1.2	422	12.9	0.5	414	17.5	1.4	387	25.6	1.4
	Area 2C	2,308	18.5	0.5	2,475	18.8	0.5	3,318	14.0	0.3	3,560	14.3	0.4	3,901	NA ^a	NA ^a
All	Area 2C	7,142	18.9	0.4	8,341	19.9	0.4	10,280	17.2	0.4	10,532	17.9	0.4	13,178	NA ^a	NA ^a

^a - NA = final estimates could not be calculated for 2007 because they must be weighted by SWHS harvest estimates that are not yet available.

Table 3. Number of fish sampled (n), and estimated mean net weight (lb) and standard errors in the Area 3A recreational fishery by Statewide Harvest Survey (SWHS) area, 2003-2007. Final estimates of charter, private, and overall mean weight could not be calculated for 2007 because SWHS harvest estimates are not yet available.

User	SWHS Area	2003			2004			2005			2006			2007		
		n	Mean Wt	SE (Wt)	n	Mean Wt	SE (Wt)									
Charter	Central Cook Inlet	725	15.9	0.5	678	14.8	0.5	607	16.2	0.6	992	15.8	0.4	1,016	15.6	0.4
	Lower Cook Inlet	790	21.7	0.6	1,393	19.7	0.5	1,236	17.8	0.7	1,071	17.6	0.5	961	16.5	0.5
	Kodiak	167	21.2	1.5	319	19.3	0.8	369	19.6	0.9	412	22.1	1.0	255	17.0	0.6
	North Gulf Coast	594	19.9	0.9	819	17.5	0.6	587	14.3	0.5	351	15.3	0.9	760	13.4	0.5
	Eastern PWS	779	33.4	1.1	409	25.5	1.0	583	25.0	0.9	348	27.9	1.3	489	26.3	1.2
	Western PWS	363	16.2	0.7	344	18.7	0.8	501	17.9	0.9	358	18.8	0.8	321	20.4	0.9
	Yakutat	353	36.8	1.6	1,127	33.3	0.9	1,084	41.1	0.9	1,085	38.7	0.9	951	41.7	1.0
	Area 3A	3,771	20.7	0.3	5,089	18.6	0.3	4,967	17.8	0.3	4,617	17.9	0.3	4,753	NA ^a	NA ^a
Private	Central Cook Inlet	298	17.4	0.9	335	12.7	0.7	86	18.1	1.6	225	13.2	0.6	202	14.5	0.6
	Lower Cook Inlet	464	16.3	0.6	339	14.1	0.7	551	13.5	0.6	509	12.8	0.6	445	13.2	0.6
	Kodiak	489	24.5	1.1	598	19.8	0.8	561	17.1	0.7	426	19.6	1.0	358	17.6	0.9
	North Gulf Coast	185	12.7	0.7	341	12.8	0.8	183	15.9	1.6	274	13.8	1.0	165	10.7	0.9
	Eastern PWS	150	22.1	2.0	277	16.0	1.1	256	13.3	1.0	88	21.4	2.5	88	13.6	1.6
	Western PWS	78	21.7	2.5	227	18.7	1.4	357	19.5	1.1	323	19.4	1.2	388	14.2	0.8
	Yakutat	19	21.6	4.7	190	17.8	1.2	416	21.4	1.0	110	19.0	2.4	105	19.5	2.0
	Area 3A	1,683	17.3	0.4	2,307	14.4	0.4	2,410	15.6	0.5	1,955	14.6	0.4	1,751	NA ^a	NA ^a
All	Area 3A	5,454	19.3	0.3	7,396	16.9	0.2	7,377	17.0	0.3	6,572	16.7	0.2	6,504	NA ^a	NA ^a

^a - NA = final estimates could not be calculated for 2007 because they must be weighted by SWHS harvest estimates that are not yet available.

Table 4. Estimated Area 2C recreational harvest in numbers of fish (from the Statewide Harvest Survey) and pounds (based on mean weights from this study) and associated standard errors (SEs), 2003-2006.

User	SWHS Area	Harvest (number of fish)				Harvest (lb)			
		2003	2004	2005	2006	2003	2004	2005	2006
Charter	Ketchikan	5,043	9,412	8,520	9,210	86,235	194,828	155,064	174,358
	Prince of Wales Island	22,686	20,478	30,559	24,781	247,277	241,640	302,534	240,483
	Petersburg/Wrangell	3,621	5,183	6,121	5,627	93,422	115,581	154,861	148,550
	Sitka	24,877	31,691	33,129	33,159	505,003	694,033	808,348	840,143
	Juneau	8,838	6,662	10,915	7,043	159,968	116,585	174,640	101,053
	Haines/Skagway ^a	281	296	282	537	5,086	5,180	4,512	7,705
	Glacier Bay	8,438	10,605	12,680	10,114	314,737	381,780	352,504	291,252
	Area 2C	73,784	84,327	102,206	90,471	1,411,729	1,749,628	1,952,463	1,803,544
Private	Ketchikan	3,767	10,526	7,231	5,328	56,128	176,837	99,788	72,049
	Prince of Wales Island	6,621	10,603	8,385	11,486	72,169	138,899	106,490	122,978
	Petersburg/Wrangell	3,948	6,966	5,755	10,174	80,144	126,085	90,354	156,512
	Sitka	7,485	7,814	9,056	6,249	104,790	135,182	136,746	105,184
	Juneau	11,692	12,882	14,747	7,600	223,317	247,334	215,306	97,912
	Haines/Skagway ^a	855	567	481	368	16,331	10,886	7,023	4,741
	Glacier Bay	11,329	13,631	14,709	9,315	293,421	351,680	189,746	163,186
	Area 2C	45,697	62,989	60,364	50,520	846,300	1,186,904	845,451	722,562
All	Area 2C	119,481	147,316	162,570	140,991	2,258,029	2,936,531	2,797,914	2,526,106
Charter	SE(Harvest)				SE(Harvest lb)				
	Ketchikan	710	1,170	1,017	1,022	14,299	25,534	20,108	20,633
	Prince of Wales Island	1,533	1,736	2,166	1,996	19,954	21,499	22,677	20,340
	Petersburg/Wrangell	568	910	963	1,106	14,895	20,475	24,668	29,797
	Sitka	1,544	1,875	2,271	1,943	35,009	55,648	69,895	68,457
	Juneau	1,288	938	1,436	926	26,040	17,467	23,989	14,805
	Haines/Skagway ^a	183	168	148	224	3,324	2,948	2,373	3,246
	Glacier Bay	1,095	1,488	1,918	1,145	41,162	53,837	53,695	33,712
Private	Area 2C	2,995	3,397	4,074	3,471	66,939	85,656	94,687	89,459
	Ketchikan	739	1,355	1,041	869	11,584	24,771	15,186	12,010
	Prince of Wales Island	967	1,472	1,184	1,437	11,038	20,684	16,150	16,168
	Petersburg/Wrangell	686	989	1,151	1,347	14,338	18,408	18,402	21,476
	Sitka	1,041	1,070	1,875	911	16,330	24,389	31,147	18,235
	Juneau	1,775	1,480	1,834	1,008	35,369	30,437	27,449	13,836
	Haines/Skagway ^a	238	206	161	216	4,602	3,981	2,358	2,789
	Glacier Bay	1,250	1,786	1,956	1,122	34,665	48,803	26,328	23,687
All	Area 2C	2,763	3,303	3,689	2,789	56,216	70,272	55,137	44,858

^a Sport harvested halibut were not sampled Haines/Skagway, so the harvest estimates in pounds are based on Juneau net weight estimates for the charter and private fishery.

Table 5. Estimated Area 3A recreational harvest in numbers of fish (from the Statewide Harvest Survey) and pounds (based on mean weights from this study) and associated standard errors (SEs), 2003-2006.

User	SWHS Area	Harvest (number of fish)				Harvest (lb)			
		2003	2004	2005	2006	2003	2004	2005	2006
Charter	Central Cook Inlet	45,559	50,915	54,057	55,915	724,388	753,542	875,723	883,891
	Lower Cook Inlet	63,881	76,164	81,004	79,560	1,386,218	1,500,431	1,441,871	1,400,256
	Kodiak	8,025	12,285	12,402	14,219	170,130	237,101	243,079	314,309
	North Gulf Coast	27,032	34,484	35,605	32,387	537,937	603,470	509,152	495,198
	Eastern PWS	8,624	12,219	11,759	9,119	288,042	311,585	293,975	254,200
	Western PWS	5,424	7,443	7,381	9,264	87,869	139,184	132,120	174,274
	Yakutat	5,084	3,698	4,694	3,651	187,091	123,143	192,923	141,399
	Area 3A	163,629	197,208	206,902	204,115	3,381,675	3,668,456	3,688,843	3,663,527
Private	Central Cook Inlet	32,149	35,192	31,491	28,704	559,393	446,938	569,987	380,015
	Lower Cook Inlet	48,505	49,431	52,143	45,263	790,632	696,977	703,931	577,961
	Kodiak	10,455	10,600	11,720	11,000	256,148	209,880	200,412	215,907
	North Gulf Coast	16,281	22,156	18,280	16,681	206,769	283,597	290,652	229,680
	Eastern PWS	6,337	10,389	7,225	6,633	140,048	166,224	96,093	142,172
	Western PWS	3,985	6,293	5,685	6,030	86,475	117,679	110,858	116,988
	Yakutat	292	899	542	576	6,307	16,002	11,599	10,951
	Area 3A	118,004	134,960	127,086	114,887	2,045,772	1,937,297	1,983,532	1,673,674
All	Area 3A	281,633	332,168	333,988	319,002	5,427,447	5,605,753	5,672,375	5,337,201
Charter	SE(Harvest)				SE(Harvest lb)				
	Central Cook Inlet	2,187	2,191	2,270	2,550	42,409	41,076	48,690	46,946
	Lower Cook Inlet	2,239	2,634	2,855	3,309	60,809	64,264	74,552	68,563
	Kodiak	1,089	1,227	1,329	1,578	25,973	25,531	28,468	37,602
	North Gulf Coast	1,685	1,735	1,801	1,802	41,032	37,280	31,475	40,199
	Eastern PWS	810	972	1,580	915	28,601	27,790	40,901	27,923
	Western PWS	571	639	679	794	9,990	13,448	13,704	16,851
	Yakutat	581	556	583	540	22,862	18,789	24,344	21,168
Private	Area 3A	4,198	4,445	4,812	5,068	103,054	99,410	110,987	108,372
	Central Cook Inlet	2,335	2,576	3,006	3,146	49,793	41,706	74,115	44,931
	Lower Cook Inlet	3,379	2,824	4,734	3,050	62,424	53,734	70,229	46,247
	Kodiak	1,248	1,266	1,333	1,365	32,474	26,304	24,380	28,738
	North Gulf Coast	1,622	1,481	1,337	1,239	23,602	26,496	36,336	23,692
	Eastern PWS	719	1,052	712	858	20,346	20,368	11,706	24,814
	Western PWS	473	613	643	659	14,236	14,532	14,005	14,761
	Yakutat	162	335	255	254	3,684	6,050	5,479	4,984
All	Area 3A	4,993	4,687	6,011	5,133	99,409	84,825	115,939	85,780
		6,129	5,816	7,419	6,725	139,874	124,697	159,899	134,392

Table 6. Length composition of the Area 2C recreational harvest by SWHS area, 2003-2007. Columns for each port show the number of fish in each length group (No.), proportion (p), and standard error of the proportion(SE).

Length Class Midpoint (cm)	Ketchikan			Craig/Klawock			Petersburg/Wrangell			Sitka			Juneau			Gustavus/Elfin Cove		
	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)
2003																		
30	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
40	0	0.000	--	0	0.000	--	4	0.003	0.002	0	0.000	--	0	0.000	--	0	0.000	--
50	1	0.002	0.002	4	0.004	0.002	4	0.003	0.002	6	0.004	0.002	5	0.007	0.003	0	0.000	--
60	11	0.025	0.008	54	0.053	0.007	13	0.011	0.003	27	0.019	0.004	16	0.022	0.006	1	0.000	0.000
70	72	0.166	0.018	424	0.416	0.015	79	0.064	0.007	125	0.090	0.008	121	0.170	0.014	43	0.018	0.003
80	141	0.326	0.023	334	0.327	0.015	202	0.164	0.011	436	0.315	0.012	219	0.308	0.017	160	0.067	0.005
90	123	0.284	0.022	122	0.120	0.010	291	0.237	0.012	401	0.290	0.012	134	0.188	0.015	268	0.113	0.007
100	41	0.095	0.014	40	0.039	0.006	266	0.217	0.012	143	0.103	0.008	81	0.114	0.012	503	0.212	0.008
110	18	0.042	0.010	17	0.017	0.004	152	0.124	0.009	79	0.057	0.006	43	0.060	0.009	426	0.180	0.008
120	9	0.021	0.007	9	0.009	0.003	92	0.075	0.008	56	0.040	0.005	29	0.041	0.007	351	0.148	0.007
130	4	0.009	0.005	3	0.003	0.002	51	0.042	0.006	33	0.024	0.004	25	0.035	0.007	267	0.113	0.006
140	6	0.014	0.006	2	0.002	0.001	39	0.032	0.005	37	0.027	0.004	10	0.014	0.004	139	0.059	0.005
150	2	0.005	0.003	6	0.006	0.002	13	0.011	0.003	12	0.009	0.002	8	0.011	0.004	95	0.040	0.004
160	2	0.005	0.003	2	0.002	0.001	11	0.009	0.003	13	0.009	0.003	17	0.024	0.006	63	0.027	0.003
170	1	0.002	0.002	1	0.001	0.001	2	0.002	0.001	6	0.004	0.002	1	0.001	0.001	25	0.011	0.002
180	0	0.000	--	1	0.001	0.001	4	0.003	0.002	6	0.004	0.002	1	0.001	0.001	10	0.004	0.001
190	1	0.002	0.002	0	0.000	--	2	0.002	0.001	2	0.001	0.001	1	0.001	0.001	12	0.005	0.001
200	0	0.000	--	1	0.001	0.001	2	0.002	0.001	1	0.001	0.001	1	0.001	0.001	3	0.001	0.001
210	1	0.002	0.002	0	0.000	--	1	0.001	0.001	2	0.001	0.001	0	0.000	--	2	0.001	0.001
220	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	4	0.002	0.001
	433			1,020			1,228			1,385			712			2,372		
2004																		
30	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
40	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
50	2	0.002	0.001	11	0.006	0.002	3	0.002	0.001	0	0.000	--	2	0.003	0.002	2	0.001	0.001
60	28	0.029	0.005	177	0.092	0.007	31	0.022	0.004	35	0.051	0.008	23	0.029	0.006	7	0.003	0.001
70	147	0.154	0.012	578	0.299	0.010	114	0.080	0.007	115	0.166	0.014	111	0.141	0.012	42	0.016	0.003
80	269	0.282	0.015	610	0.316	0.011	263	0.185	0.010	218	0.315	0.018	221	0.282	0.016	170	0.066	0.005
90	224	0.235	0.014	339	0.175	0.009	353	0.248	0.011	136	0.197	0.015	166	0.211	0.015	288	0.112	0.006
100	127	0.133	0.011	117	0.061	0.005	311	0.219	0.011	55	0.079	0.010	107	0.136	0.012	544	0.212	0.008
110	47	0.049	0.007	36	0.019	0.003	165	0.116	0.009	29	0.042	0.008	63	0.080	0.010	430	0.168	0.007
120	31	0.032	0.006	19	0.010	0.002	79	0.056	0.006	17	0.025	0.006	44	0.056	0.008	423	0.165	0.007
130	29	0.030	0.006	12	0.006	0.002	49	0.034	0.005	26	0.038	0.007	18	0.023	0.005	320	0.125	0.007
140	15	0.016	0.004	12	0.006	0.002	26	0.018	0.004	24	0.035	0.007	8	0.010	0.004	168	0.066	0.005
150	16	0.017	0.004	11	0.006	0.002	11	0.008	0.002	16	0.023	0.006	7	0.009	0.003	87	0.034	0.004
160	10	0.010	0.003	5	0.003	0.001	11	0.008	0.002	8	0.012	0.004	7	0.009	0.003	40	0.016	0.002
170	4	0.004	0.002	2	0.001	0.001	2	0.001	0.001	6	0.009	0.004	5	0.006	0.003	18	0.007	0.002
180	4	0.004	0.002	1	0.001	0.001	2	0.001	0.001	1	0.001	0.001	2	0.003	0.002	13	0.005	0.001
190	2	0.002	0.001	2	0.001	0.001	1	0.001	0.001	1	0.001	0.001	1	0.001	0.001	6	0.002	0.001
200	0	0.000	--	0	0.000	--	0	0.000	--	2	0.003	0.002	0	0.000	--	2	0.001	0.001
210	0	0.000	--	1	0.001	0.001	0	0.000	--	3	0.004	0.002	0	0.000	--	1	0.000	0.000
220+	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	3	0.001	0.001
	955			1,933			1,421			692			785			2,564		

(continued)

Table 6. Page 2 of 3.

Length Class Midpoint (cm)	Ketchikan			Craig/Klawock			Petersburg/Wrangell			Sitka			Juneau			Gustavus/Elfin Cove		
	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)
2005																		
30	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
40	0	0.000	--	0	0.000	--	1	0.001	0.001	1	0.001	0.001	1	0.001	0.001	0	0.000	--
50	2	0.003	0.002	24	0.007	0.001	9	0.006	0.002	5	0.007	0.003	12	0.009	0.003	2	0.001	0.001
60	50	0.067	0.009	898	0.260	0.007	62	0.040	0.005	54	0.080	0.010	109	0.085	0.008	32	0.012	0.002
70	159	0.214	0.015	1,220	0.353	0.008	173	0.112	0.008	115	0.171	0.015	250	0.194	0.011	237	0.092	0.006
80	200	0.269	0.016	685	0.198	0.007	287	0.186	0.010	148	0.220	0.016	359	0.279	0.012	513	0.199	0.008
90	149	0.201	0.015	320	0.093	0.005	335	0.217	0.010	115	0.171	0.015	253	0.196	0.011	416	0.162	0.007
100	83	0.112	0.012	120	0.035	0.003	301	0.195	0.010	76	0.113	0.012	144	0.112	0.009	465	0.181	0.008
110	30	0.040	0.007	62	0.018	0.002	170	0.110	0.008	43	0.064	0.009	69	0.054	0.006	305	0.118	0.006
120	26	0.035	0.007	30	0.009	0.002	100	0.065	0.006	22	0.033	0.007	39	0.030	0.005	227	0.088	0.006
130	16	0.022	0.005	32	0.009	0.002	39	0.025	0.004	26	0.039	0.007	23	0.018	0.004	171	0.066	0.005
140	13	0.017	0.005	27	0.008	0.001	27	0.017	0.003	26	0.039	0.007	20	0.016	0.003	101	0.039	0.004
150	7	0.009	0.004	12	0.003	0.001	16	0.010	0.003	18	0.027	0.006	5	0.004	0.002	47	0.018	0.003
160	4	0.005	0.003	12	0.003	0.001	14	0.009	0.002	8	0.012	0.004	2	0.002	0.001	28	0.011	0.002
170	3	0.004	0.002	5	0.001	0.001	4	0.003	0.001	5	0.007	0.003	2	0.002	0.001	17	0.007	0.002
180	1	0.001	0.001	6	0.002	0.001	2	0.001	0.001	3	0.004	0.003	0	0.000	--	4	0.002	0.001
190	0	0.000	--	3	0.001	0.001	2	0.001	0.001	5	0.007	0.003	1	0.001	0.001	2	0.001	0.001
200	0	0.000	--	0	0.000	--	2	0.001	0.001	2	0.003	0.002	0	0.000	--	3	0.001	0.001
210	0	0.000	--	1	0.000	0	0	0.000	--	1	0.001	0.001	0	0.000	--	2	0.001	0.001
220+	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	2	0.001	0.001
	743			3,457			1,544			673			1,289			2,574		
2006																		
30	0	0.000	--	1	0.000	--	0	0.000	--	2	0.003	0.002	2	0.003	0.002	0	0.000	--
40	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	2	0.003	0.002	0	0.000	--
50	5	0.003	0.001	25	0.007	0.001	0	0.000	--	0	0.000	--	19	0.025	0.006	3	0.001	0.001
60	102	0.062	0.006	1,019	0.285	0.008	70	0.051	0.006	38	0.058	0.009	97	0.129	0.012	72	0.029	0.003
70	430	0.260	0.011	1,320	0.369	0.008	242	0.175	0.010	137	0.210	0.016	240	0.319	0.017	291	0.115	0.006
80	440	0.266	0.011	612	0.171	0.006	275	0.199	0.011	134	0.206	0.016	163	0.216	0.015	626	0.248	0.009
90	290	0.175	0.009	272	0.076	0.004	297	0.215	0.011	95	0.146	0.014	95	0.126	0.012	449	0.178	0.008
100	151	0.091	0.007	137	0.038	0.003	228	0.165	0.010	84	0.129	0.013	47	0.062	0.009	340	0.135	0.007
110	85	0.051	0.005	62	0.017	0.002	95	0.069	0.007	25	0.038	0.008	28	0.037	0.007	160	0.063	0.005
120	67	0.040	0.005	51	0.014	0.002	57	0.041	0.005	30	0.046	0.008	22	0.029	0.006	161	0.064	0.005
130	26	0.016	0.003	30	0.008	0.002	44	0.032	0.005	33	0.051	0.009	14	0.019	0.005	107	0.042	0.004
140	26	0.016	0.003	13	0.004	0.001	29	0.021	0.004	29	0.045	0.008	13	0.017	0.005	112	0.044	0.004
150	10	0.006	0.002	7	0.002	0.001	22	0.016	0.003	25	0.038	0.008	9	0.012	0.004	69	0.027	0.003
160	13	0.008	0.002	11	0.003	0.001	12	0.009	0.002	9	0.014	0.005	1	0.001	0.001	56	0.022	0.003
170	1	0.001	0.001	4	0.001	0.001	2	0.001	0.001	2	0.003	0.002	0	0.000	--	30	0.012	0.002
180	3	0.002	0.001	4	0.001	0.001	4	0.003	0.001	2	0.003	0.002	0	0.000	--	15	0.006	0.002
190	4	0.002	0.001	3	0.001	0.000	2	0.001	0.001	2	0.003	0.002	0	0.000	--	20	0.008	0.002
200	2	0.001	0.001	2	0.001	0.000	1	0.001	0.001	1	0.002	0.002	1	0.001	0.001	5	0.002	0.001
210	0	0.000	--	1	0.000	0.000	0	0.000	--	2	0.003	0.002	0	0.000	--	2	0.001	0.001
220	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	2	0.001	0.001
>220	0	0.000	--	0	0.000	--	1	0.001	0.001	1	0.002	0.002	0	0.000	--	4	0.002	0.001
	1,655			3,574			1,381			651			753			2,524		

(continued)

Table 6. Page 3 of 3.

Length Class Midpoint (cm)	Ketchikan			Craig/Klawock			Petersburg/Wrangell			Sitka			Juneau			Gustavus/Elfin Cove		
	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)
2007																		
30	0	0.000	--	0	0.000	--	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--
40	0	0.000	--	1	0.000	0	0	0.000	--	0	0.000	--	2	0.001	0.001	1	0.000	0.000
50	2	0.002	0.001	3	0.001	0.001	1	0.001	0.001	10	0.003	0.001	35	0.023	0.004	1	0.000	0.000
60	66	0.059	0.007	504	0.236	0.009	26	0.013	0.003	213	0.073	0.005	168	0.110	0.008	86	0.035	0.004
70	312	0.277	0.013	827	0.388	0.011	240	0.122	0.007	861	0.293	0.008	428	0.279	0.011	430	0.176	0.008
80	315	0.280	0.013	454	0.213	0.009	741	0.377	0.011	779	0.266	0.008	446	0.291	0.012	462	0.190	0.008
90	175	0.155	0.011	180	0.084	0.006	286	0.146	0.008	335	0.114	0.006	216	0.141	0.009	298	0.122	0.007
100	119	0.106	0.009	63	0.030	0.004	239	0.122	0.007	170	0.058	0.004	123	0.080	0.007	291	0.119	0.007
110	36	0.032	0.005	34	0.016	0.003	134	0.068	0.006	139	0.047	0.004	46	0.030	0.004	170	0.070	0.005
120	32	0.028	0.005	17	0.008	0.002	105	0.053	0.005	108	0.037	0.003	24	0.016	0.003	166	0.068	0.005
130	24	0.021	0.004	11	0.005	0.002	78	0.040	0.004	106	0.036	0.003	19	0.012	0.003	118	0.048	0.004
140	23	0.020	0.004	13	0.006	0.002	54	0.027	0.004	72	0.025	0.003	8	0.005	0.002	107	0.044	0.004
150	9	0.008	0.003	6	0.003	0.001	37	0.019	0.003	65	0.022	0.003	12	0.008	0.002	99	0.041	0.004
160	8	0.007	0.003	7	0.003	0.001	8	0.004	0.001	34	0.012	0.002	3	0.002	0.001	84	0.034	0.004
170	1	0.001	0.001	3	0.001	0.001	3	0.002	0.001	23	0.008	0.002	1	0.001	0.001	56	0.023	0.003
180	2	0.002	0.001	4	0.002	0.001	7	0.004	0.001	11	0.004	0.001	0	0.000	--	26	0.011	0.002
190	2	0.002	0.001	3	0.001	0.001	4	0.002	0.001	1	0.000	0.000	2	0.001	0.001	22	0.009	0.002
200	1	0.001	0.001	2	0.001	0.001	1	0.001	0.001	3	0.001	0.001	0	0.000	--	10	0.004	0.001
210	0	0.000	--	0	0.000	--	0	0.000	--	3	0.001	0.001	0	0.000	--	6	0.002	0.001
220	0	0.000	--	0	0.000	--	0	0.000	--	1	0.000	0	0	0.000	--	4	0.002	0.001
	1,127			2,132			1,965			2,934			1,533			2,437		

Table 7. Length composition of the Area 3A recreational harvest by SWHS area, 2003-2007. Columns for each port show the number of fish in each length group (No.), proportion (p), and standard error of the proportion(SE).

Length Class Midpoint (cm)	Kodiak			Lower Cook Inlet			Central Cook inlet			North Gulf Coast			Western PWS			Eastern PWS			Yakutat		
	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)
2003																					
40	0	0.000	--	0	0.000	--	0	0.000	--	2	0.003	0.002	1	0.002	0.002	0	0.000	--	0	0.000	--
50	1	0.001	0.001	2	0.002	0.001	10	0.010	0.003	6	0.008	0.003	1	0.002	0.002	8	0.009	0.003	1	0.003	0.003
60	10	0.015	0.005	14	0.011	0.003	35	0.034	0.006	28	0.036	0.007	20	0.045	0.010	5	0.005	0.002	0	0.000	--
70	50	0.075	0.010	95	0.076	0.007	187	0.183	0.012	143	0.184	0.014	72	0.163	0.018	56	0.060	0.008	1	0.003	0.003
80	163	0.244	0.017	264	0.211	0.012	262	0.256	0.014	234	0.300	0.016	105	0.238	0.020	132	0.142	0.011	48	0.129	0.017
90	135	0.202	0.016	391	0.312	0.013	243	0.238	0.013	167	0.214	0.015	112	0.254	0.021	206	0.222	0.014	70	0.188	0.020
100	127	0.190	0.015	222	0.177	0.011	134	0.131	0.011	63	0.081	0.010	53	0.120	0.016	146	0.157	0.012	66	0.177	0.020
110	54	0.081	0.011	115	0.092	0.008	67	0.065	0.008	39	0.050	0.008	36	0.082	0.013	90	0.097	0.010	42	0.113	0.016
120	43	0.064	0.009	69	0.055	0.006	36	0.035	0.006	26	0.033	0.006	14	0.032	0.008	67	0.072	0.008	34	0.091	0.015
130	27	0.040	0.008	28	0.022	0.004	24	0.023	0.005	19	0.024	0.006	12	0.027	0.008	58	0.062	0.008	32	0.086	0.015
140	27	0.040	0.008	25	0.020	0.004	12	0.012	0.003	23	0.030	0.006	6	0.014	0.006	65	0.070	0.008	30	0.081	0.014
150	14	0.021	0.006	13	0.010	0.003	7	0.007	0.003	11	0.014	0.004	4	0.009	0.005	39	0.042	0.007	21	0.056	0.012
160	7	0.010	0.004	11	0.009	0.003	1	0.001	0.001	10	0.013	0.004	2	0.005	0.003	21	0.023	0.005	15	0.040	0.010
170	6	0.009	0.004	4	0.003	0.002	1	0.001	0.001	6	0.008	0.003	3	0.007	0.004	19	0.020	0.005	7	0.019	0.007
180	3	0.004	0.003	1	0.001	0.001	2	0.002	0.001	2	0.003	0.002	0	0.000	--	10	0.011	0.003	1	0.003	0.003
190	1	0.001	0.001	0	0.000	--	2	0.002	0.001	0	0.000	--	0	0.000	--	4	0.004	0.002	1	0.003	0.003
200	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	2	0.002	0.002	3	0.008	0.005
210	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	1	0.001	0.001	0	0.000	--
220	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
	669			1,254			1,023			779			441			929			372		
2004																					
40	0	0.000	--	2	0.001	0.001	1	0.001	0.001	0	0.000	--	0	0.000	--	3	0.004	0.003	0	0.000	--
50	9	0.010	0.003	12	0.007	0.002	21	0.021	0.004	26	0.022	0.004	1	0.002	0.002	13	0.019	0.005	2	0.002	0.001
60	22	0.024	0.005	34	0.020	0.003	129	0.127	0.010	81	0.070	0.007	33	0.058	0.010	35	0.051	0.008	6	0.005	0.002
70	111	0.121	0.011	116	0.067	0.006	237	0.234	0.013	234	0.202	0.012	81	0.142	0.015	78	0.114	0.012	44	0.033	0.005
80	219	0.239	0.014	370	0.214	0.010	217	0.214	0.013	332	0.286	0.013	124	0.217	0.017	124	0.181	0.015	186	0.141	0.010
90	215	0.234	0.014	568	0.328	0.011	176	0.174	0.012	210	0.181	0.011	124	0.217	0.017	158	0.230	0.016	284	0.216	0.011
100	137	0.149	0.012	262	0.151	0.009	107	0.106	0.010	117	0.101	0.009	100	0.175	0.016	109	0.159	0.014	264	0.200	0.011
110	73	0.080	0.009	164	0.095	0.007	44	0.043	0.006	34	0.029	0.005	51	0.089	0.012	42	0.061	0.009	156	0.118	0.009
120	47	0.051	0.007	104	0.060	0.006	31	0.031	0.005	49	0.042	0.006	20	0.035	0.008	35	0.051	0.008	89	0.068	0.007
130	40	0.044	0.007	46	0.027	0.004	27	0.027	0.005	34	0.029	0.005	10	0.018	0.005	30	0.044	0.008	85	0.065	0.007
140	19	0.021	0.005	21	0.012	0.003	18	0.018	0.004	15	0.013	0.003	11	0.019	0.006	32	0.047	0.008	67	0.051	0.006
150	17	0.019	0.004	17	0.010	0.002	1	0.001	0.001	11	0.009	0.003	5	0.009	0.004	13	0.019	0.005	61	0.046	0.006
160	4	0.004	0.002	7	0.004	0.002	3	0.003	0.002	10	0.009	0.003	6	0.011	0.004	7	0.010	0.004	33	0.025	0.004
170	3	0.003	0.002	5	0.003	0.001	0	0.000	--	4	0.003	0.002	3	0.005	0.003	5	0.007	0.003	19	0.014	0.003
180	0	0.000	--	3	0.002	0.001	1	0.001	0.001	1	0.001	0.001	1	0.002	0.002	2	0.003	0.002	12	0.009	0.003
190	1	0.001	0.001	0	0.000	--	0	0.000	--	1	0.001	0.001	1	0.002	0.002	0	0.000	--	2	0.002	0.001
200	0	0.000	--	0	0.000	--	0	0.000	--	1	0.001	0.001	0	0.000	--	0	0.000	--	6	0.005	0.002
210	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	1	0.001	0.001
220	0	0.000	--	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
	917			1,732			1,013			1,160			571			686			1,317		

(continued)

Table 7. Page 2 of 3.

Length Class Midpoint (cm)	Kodiak			Lower Cook Inlet			Central Cook inlet			North Gulf Coast			Western PWS			Eastern PWS			Yakutat		
	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)
2005																					
40	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	1	0.001	0.001
50	1	0.001	0.001	5	0.003	0.001	0	0.000	--	6	0.008	0.003	6	0.007	0.003	12	0.014	0.004	2	0.001	0.001
60	27	0.029	0.006	27	0.015	0.003	15	0.022	0.006	39	0.051	0.008	41	0.048	0.007	37	0.044	0.007	20	0.013	0.003
70	134	0.144	0.012	165	0.092	0.007	112	0.162	0.014	160	0.208	0.015	146	0.170	0.013	100	0.119	0.011	76	0.051	0.006
80	311	0.334	0.015	569	0.318	0.011	235	0.339	0.018	266	0.345	0.017	226	0.263	0.015	171	0.204	0.014	178	0.119	0.008
90	198	0.213	0.013	604	0.338	0.011	152	0.219	0.016	156	0.203	0.014	182	0.212	0.014	180	0.215	0.014	260	0.173	0.010
100	86	0.092	0.010	200	0.112	0.007	75	0.108	0.012	61	0.079	0.010	98	0.114	0.011	146	0.174	0.013	223	0.149	0.009
110	54	0.058	0.008	84	0.047	0.005	41	0.059	0.009	29	0.038	0.007	51	0.059	0.008	55	0.066	0.009	147	0.098	0.008
120	38	0.041	0.006	58	0.032	0.004	20	0.029	0.006	20	0.026	0.006	36	0.042	0.007	46	0.055	0.008	125	0.083	0.007
130	34	0.037	0.006	31	0.017	0.003	23	0.033	0.007	11	0.014	0.004	28	0.033	0.006	27	0.032	0.006	107	0.071	0.007
140	22	0.024	0.005	18	0.010	0.002	9	0.013	0.004	11	0.014	0.004	23	0.027	0.006	24	0.029	0.006	149	0.099	0.008
150	13	0.014	0.004	9	0.005	0.002	8	0.012	0.004	3	0.004	0.002	4	0.005	0.002	17	0.020	0.005	125	0.083	0.007
160	8	0.009	0.003	6	0.003	0.001	1	0.001	0.001	3	0.004	0.002	8	0.009	0.003	15	0.018	0.005	48	0.032	0.005
170	1	0.001	0.001	2	0.001	0.001	1	0.001	0.001	2	0.003	0.002	4	0.005	0.002	6	0.007	0.003	20	0.013	0.003
180	0	0.000	--	3	0.002	0.001	0	0.000	--	2	0.003	0.002	2	0.002	0.002	3	0.004	0.002	11	0.007	0.002
190	0	0.000	--	1	0.001	0.001	1	0.001	0.001	1	0.001	0.001	1	0.001	0.001	0	0.000	--	4	0.003	0.001
200	2	0.002	0.002	2	0.001	0.001	0	0.000	--	0	0.000	--	2	0.002	0.002	0	0.000	--	2	0.001	0.001
210	0	0.000	--	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	2	0.001	0.001
220	0	0.000	--	2	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
	930			1,787			693			770			858			839			1,500		
2006																					
40	1	0.001	0.001	0	0.000	--	0	0.000	--	1	0.002	0.002	0	0.000	--	0	0.000	--	3	0.003	0.001
50	1	0.001	0.001	3	0.002	0.001	0	0.000	--	3	0.005	0.003	0	0.000	--	3	0.007	0.004	4	0.003	0.002
60	16	0.019	0.005	42	0.027	0.004	13	0.011	0.003	41	0.066	0.010	48	0.070	0.010	16	0.037	0.009	34	0.028	0.005
70	89	0.106	0.011	179	0.113	0.008	124	0.102	0.009	140	0.224	0.017	110	0.162	0.014	35	0.080	0.013	80	0.067	0.007
80	227	0.271	0.015	447	0.283	0.011	541	0.445	0.014	217	0.347	0.019	157	0.231	0.016	77	0.177	0.018	170	0.142	0.010
90	209	0.249	0.015	492	0.311	0.012	321	0.264	0.013	123	0.197	0.016	142	0.209	0.016	89	0.204	0.019	169	0.141	0.010
100	105	0.125	0.011	195	0.123	0.008	89	0.073	0.007	41	0.066	0.010	79	0.116	0.012	54	0.124	0.016	114	0.095	0.009
110	59	0.070	0.009	105	0.066	0.006	44	0.036	0.005	13	0.021	0.006	47	0.069	0.010	33	0.076	0.013	84	0.070	0.007
120	39	0.047	0.007	63	0.040	0.005	26	0.021	0.004	9	0.014	0.005	28	0.041	0.008	38	0.087	0.014	89	0.074	0.008
130	32	0.038	0.007	31	0.020	0.003	25	0.021	0.004	9	0.014	0.005	33	0.048	0.008	38	0.087	0.014	121	0.101	0.009
140	28	0.033	0.006	9	0.006	0.002	17	0.014	0.003	15	0.024	0.006	18	0.026	0.006	32	0.073	0.013	146	0.122	0.009
150	19	0.023	0.005	10	0.006	0.002	12	0.010	0.003	5	0.008	0.004	11	0.016	0.005	13	0.030	0.008	109	0.091	0.008
160	7	0.008	0.003	0	0.000	0.000	2	0.002	0.001	6	0.010	0.004	2	0.003	0.002	2	0.005	0.003	43	0.036	0.005
170	2	0.002	0.002	0	0.000	0.000	2	0.002	0.001	0	0.000	--	2	0.003	0.002	3	0.007	0.004	15	0.013	0.003
180	2	0.002	0.002	1	0.001	0.001	1	0.001	0.001	0	0.000	--	3	0.004	0.003	2	0.005	0.003	8	0.007	0.002
190	1	0.001	0.001	1	0.001	0.001	0	0.000	--	2	0.003	0.002	1	0.001	0.001	0	0.000	--	4	0.003	0.002
200	1	0.001	0.001	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	1	0.002	0.002	1	0.001	0.001
210	0	0.000	--	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	1	0.001	0.001
220	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
	838			1,580			1,217			625			681			436			1,195		

(continued)

Table 7. Page 3 of 3.

Length Class Midpoint (cm)	Kodiak			Lower Cook Inlet			Central Cook inlet			North Gulf Coast			Western PWS			Eastern PWS			Yakutat		
	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)	No.	p	SE(p)
<u>2007</u>																					
40	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--
50	0	0.000	--	1	0.001	0.001	0	0.000	--	5	0.005	0.002	2	0.003	0.002	3	0.005	0.003	1	0.001	0.001
60	8	0.013	0.005	17	0.012	0.003	5	0.004	0.002	47	0.051	0.007	33	0.047	0.008	7	0.012	0.005	19	0.018	0.004
70	72	0.117	0.013	163	0.116	0.009	99	0.081	0.008	191	0.206	0.013	138	0.195	0.015	70	0.121	0.014	68	0.064	0.008
80	182	0.297	0.018	480	0.341	0.013	462	0.379	0.014	357	0.386	0.016	205	0.289	0.017	147	0.255	0.018	146	0.138	0.011
90	179	0.292	0.018	405	0.288	0.012	400	0.328	0.013	220	0.238	0.014	133	0.188	0.015	126	0.218	0.017	140	0.133	0.010
100	83	0.135	0.014	171	0.122	0.009	141	0.116	0.009	47	0.051	0.007	76	0.107	0.012	56	0.097	0.012	95	0.090	0.009
110	27	0.044	0.008	80	0.057	0.006	52	0.043	0.006	20	0.022	0.005	36	0.051	0.008	39	0.068	0.010	78	0.074	0.008
120	29	0.047	0.009	43	0.031	0.005	21	0.017	0.004	9	0.010	0.003	32	0.045	0.008	26	0.045	0.009	66	0.063	0.007
130	18	0.029	0.007	14	0.010	0.003	17	0.014	0.003	13	0.014	0.004	22	0.031	0.007	35	0.061	0.010	113	0.107	0.010
140	1	0.002	0.002	15	0.011	0.003	10	0.008	0.003	7	0.008	0.003	18	0.025	0.006	30	0.052	0.009	131	0.124	0.010
150	8	0.013	0.005	9	0.006	0.002	5	0.004	0.002	3	0.003	0.002	10	0.014	0.004	22	0.038	0.008	114	0.108	0.010
160	4	0.007	0.003	3	0.002	0.001	4	0.003	0.002	4	0.004	0.002	2	0.003	0.002	8	0.014	0.005	63	0.060	0.007
170	2	0.003	0.002	1	0.001	0.001	2	0.002	0.001	0	0.000	--	1	0.001	0.001	5	0.009	0.004	14	0.013	0.004
180	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	1	0.001	0.001	2	0.003	0.002	5	0.005	0.002
190	0	0.000	--	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	1	0.001	0.001
200	0	0.000	--	2	0.001	0.001	0	0.000	--	2	0.002	0.002	0	0.000	--	0	0.000	--	1	0.001	0.001
210	0	0.000	--	1	0.001	0.001	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	1	0.001	0.001
220	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	0	0.000	--	1	0.002	0.002	0	0.000	--
	613			1,406			1,218			925			709			577			1,056		

Table 8. Estimated proportions of female halibut in the recreational harvest in Area 3A (excluding Yakutat), 2003-2006.

SWHS Area	2003			2004			2005			2006		
	Sample Size	Proportion Female (p)	SE(p)	Sample Size	Proportion Female (p)	SE(p)	Sample Size	Proportion Female (p)	SE(p)	Sample Size	Proportion Female (p)	SE(p)
Central Cook Inlet	1,019	0.833	0.012	1,006	0.820	0.012	684	0.811	0.017	1,217	0.863	0.010
Lower Cook Inlet	1,213	0.828	0.012	1,720	0.692	0.013	1,771	0.655	0.012	1,566	0.771	0.012
Kodiak	659	0.727	0.019	916	0.685	0.017	929	0.674	0.016	837	0.803	0.014
North Gulf Coast	767	0.618	0.018	1,155	0.549	0.015	752	0.571	0.019	620	0.599	0.020
Eastern PWS	930	0.863	0.016	685	0.755	0.017	837	0.760	0.015	433	0.851	0.020
Western PWS	426	0.708	0.023	554	0.673	0.020	845	0.678	0.016	676	0.668	0.018
Total	5,014	0.787	0.007	6,036	0.704	0.007	5,818	0.690	0.007	5,349	0.771	0.006

Table 9. Spatial distribution of bottomfishing effort in Area 2C charter and private recreational fisheries, 2003-2007. Values are the estimated proportion of angler-hours in each ADF&G statistical area. Table cells are shaded if the proportion ≥ 0.10 to highlight major statistical areas.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Ketchikan											
1	101900	0.040	0.036	0.017	0.029	0.028	0.178	0.196	0.231	0.201	0.232
2	101800	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.001	0.001
3	101850	0.036	0.020	0.006	0.019	0.013	0.030	0.034	0.045	0.052	0.057
4	102501	0.068	0.091	0.086	0.013	0.041	0.096	0.082	0.122	0.078	0.091
5	101290	0.083	0.062	0.041	0.046	0.070	0.234	0.176	0.215	0.205	0.226
6	101472	0.000	0.000	0.005	0.003	0.003	0.005	0.030	0.019	0.013	0.018
7	101270	0.023	0.010	0.058	0.107	0.118	0.058	0.127	0.088	0.105	0.085
8	101452	0.022	0.039	0.023	0.031	0.049	0.048	0.043	0.037	0.022	0.029
9	101440	0.004	0.000	0.000	0.038	0.033	0.015	0.007	0.005	0.004	0.004
10	101451	0.119	0.120	0.133	0.058	0.091	0.023	0.030	0.019	0.012	0.009
11	101412	0.047	0.085	0.202	0.149	0.034	0.041	0.039	0.030	0.022	0.037
12	101411	0.093	0.100	0.020	0.090	0.047	0.099	0.085	0.038	0.098	0.047
13	101460	0.027	0.016	0.012	0.078	0.012	0.018	0.018	0.008	0.001	0.002
14	101471	0.000	0.000	0.000	0.000	0.000	0.006	0.004	0.005	0.003	0.005
16	101950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.003	0.001
17	101400	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.001	0.002
18	101480	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	101530	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.003	0.000
20	102801	0.000	0.007	0.010	0.008	0.016	0.012	0.009	0.006	0.014	0.004
21	102802	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.002	0.008
22	101510	0.058	0.004	0.000	0.000	0.018	0.001	0.000	0.004	0.003	0.006
23	102100	0.055	0.121	0.072	0.105	0.054	0.016	0.013	0.032	0.013	0.012
24	101250	0.096	0.047	0.094	0.091	0.074	0.039	0.034	0.029	0.032	0.041
25	101230	0.038	0.082	0.005	0.008	0.006	0.032	0.020	0.014	0.030	0.014
26	101210	0.134	0.088	0.168	0.079	0.213	0.030	0.035	0.012	0.035	0.033
27	101110	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.005	0.000	0.003
28	102200	0.000	0.023	0.005	0.000	0.034	0.007	0.004	0.004	0.007	0.008
29	102700	0.000	0.013	0.000	0.000	0.013	0.000	0.004	0.002	0.006	0.007
30	101430	0.052	0.036	0.024	0.021	0.014	0.001	0.003	0.005	0.014	0.000
31	102502	0.000	0.000	0.004	0.000	0.000	0.006	0.000	0.001	0.004	0.002
99	NA ^a	0.004	0.000	0.014	0.016	0.010	0.005	0.000	0.009	0.019	0.015
Craig											
1	103600	0.005	0.000	0.000	0.008	0.005	0.085	0.168	0.233	0.157	0.075
2	103500	0.018	0.000	0.043	0.012	0.086	0.037	0.123	0.139	0.303	0.169
3	103700	0.067	0.030	0.068	0.088	0.071	0.122	0.175	0.219	0.103	0.085
4	103800	0.000	0.003	0.006	0.000	0.004	0.001	0.013	0.007	0.016	0.008
5	104400	0.408	0.457	0.725	0.603	0.609	0.564	0.314	0.263	0.340	0.473
6	104350	0.374	0.377	0.108	0.102	0.100	0.123	0.169	0.050	0.034	0.119
7	104300	0.129	0.061	0.050	0.047	0.045	0.033	0.024	0.050	0.013	0.005
8	104200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	104500	0.000	0.000	0.000	0.000	0.038	0.000	0.000	0.000	0.000	0.012
10	103900	0.000	0.000	0.000	0.060	0.000	0.004	0.000	0.016	0.000	0.002
11	103400	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.006	0.008	0.001
12	103300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000
13	103210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	105500	0.000	0.004	0.000	0.064	0.042	0.025	0.014	0.000	0.000	0.034

(continued)

Table 9. Page 2 of 5.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Craig (cont.)											
17	105100	0.000	0.069	0.000	0.016	0.000	0.002	0.000	0.000	0.014	0.000
99	NA ^a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.013	0.017
Klawock											
1	103600	0.000	0.000	0.000	0.006	0.000	0.252	0.120	0.189	0.041	0.089
2	103500	0.000	0.000	0.000	0.000	0.000	0.133	0.148	0.292	0.433	0.429
3	103700	0.190	0.092	0.000	0.134	0.000	0.000	0.256	0.166	0.145	0.121
4	103800	0.000	0.041	0.000	0.000	0.000	0.000	0.047	0.041	0.034	0.024
5	104400	0.335	0.659	0.655	0.265	0.735	0.203	0.321	0.189	0.264	0.213
6	104350	0.217	0.203	0.330	0.042	0.174	0.412	0.071	0.056	0.000	0.124
7	104300	0.000	0.005	0.015	0.068	0.026	0.000	0.037	0.066	0.000	0.000
8	104200	0.000	0.000	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000
9	104500	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000
10	103900	0.114	0.000	0.000	0.032	0.000	0.000	0.000	0.000	0.072	0.000
11	103400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	103210	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000
16	105500	0.133	0.000	0.000	0.454	0.000	0.000	0.000	0.000	0.000	0.000
Petersburg											
1	106443	0.000	0.000	0.000	0.000	0.000	0.029	0.032	0.016	0.014	0.002
2	106441	0.011	0.000	0.000	0.000	0.000	0.002	0.003	0.004	0.000	0.010
3	108500	0.005	0.009	0.000	0.000	0.000	0.062	0.021	0.010	0.000	0.000
4	108600	0.000	0.000	0.002	0.008	0.110	0.092	0.140	0.222	0.216	0.177
5	110130	0.087	0.040	0.000	0.002	0.024	0.065	0.039	0.025	0.018	0.031
6	106430	0.000	0.000	0.000	0.000	0.005	0.010	0.001	0.002	0.072	0.027
7	106441	0.000	0.012	0.000	0.045	0.012	0.001	0.014	0.020	0.012	0.008
8	110160	0.783	0.649	0.521	0.587	0.527	0.463	0.380	0.326	0.262	0.352
9	106412	0.005	0.033	0.134	0.136	0.154	0.009	0.043	0.057	0.116	0.037
12	108403	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000
13	108402	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.001	0.000	0.000
14	108200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	106442	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.022	0.014
21	106302	0.042	0.039	0.025	0.068	0.081	0.098	0.041	0.005	0.022	0.078
22	106301	0.005	0.000	0.229	0.019	0.000	0.001	0.011	0.044	0.000	0.000
23	106411	0.060	0.076	0.000	0.014	0.047	0.011	0.014	0.006	0.025	0.008
24	106420	0.003	0.000	0.008	0.014	0.010	0.032	0.096	0.044	0.000	0.024
25	108410	0.000	0.000	0.017	0.008	0.003	0.006	0.019	0.044	0.104	0.083
26	110110	0.000	0.000	0.000	0.000	0.005	0.001	0.002	0.002	0.010	0.008
27	110120	0.000	0.000	0.039	0.014	0.000	0.039	0.090	0.131	0.056	0.076
28	110140	0.000	0.008	0.006	0.000	0.000	0.049	0.036	0.009	0.000	0.001
29	110150	0.000	0.032	0.006	0.019	0.000	0.009	0.016	0.002	0.022	0.000
30	110310	0.000	0.008	0.012	0.049	0.021	0.023	0.002	0.021	0.019	0.058
99	NA ^a	0.000	0.095	0.000	0.014	0.000	0.000	0.002	0.001	0.004	0.006
Wrangell											
3	108500	0.038	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	110130	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000
7	106441	0.029	0.258	0.081	0.038	0.082	0.050	0.022	0.028	0.058	0.057
9	106412	0.038	0.452	0.000	0.095	0.041	0.100	0.232	0.034	0.014	0.006

(continued)

Table 9. Page 3 of 5.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Wrangell (cont.)											
12	108403	0.000	0.000	0.000	0.000	0.000	0.042	0.000	0.000	0.008	0.079
13	108402	0.043	0.161	0.000	0.253	0.126	0.455	0.452	0.200	0.434	0.418
14	108200	0.000	0.000	0.000	0.058	0.072	0.024	0.012	0.000	0.007	0.009
15	108401	0.000	0.000	0.000	0.000	0.000	0.041	0.047	0.000	0.047	0.019
16	107300	0.000	0.000	0.000	0.038	0.000	0.006	0.000	0.005	0.007	0.001
17	107450	0.000	0.000	0.000	0.000	0.000	0.007	0.026	0.042	0.000	0.018
19	108100	0.000	0.023	0.000	0.000	0.000	0.069	0.125	0.080	0.061	0.076
20	107200	0.000	0.000	0.000	0.044	0.000	0.002	0.000	0.168	0.059	0.060
21	106302	0.512	0.059	0.126	0.066	0.251	0.119	0.056	0.207	0.115	0.174
22	106301	0.124	0.000	0.135	0.042	0.082	0.000	0.000	0.000	0.027	0.000
23	106411	0.000	0.000	0.450	0.047	0.113	0.040	0.000	0.187	0.009	0.037
24	106420	0.196	0.047	0.207	0.025	0.095	0.037	0.024	0.041	0.114	0.027
25	108410	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.003	0.000
31	107400	0.000	0.000	0.000	0.000	0.000	0.003	0.005	0.000	0.002	0.004
99	NA ^a	0.019	0.000	0.000	0.000	0.138	0.003	0.000	0.000	0.034	0.001
NA ^a	105200	0.000	0.000	0.000	0.085	0.000	0.000	0.000	0.000	0.000	0.000
NA ^a	105410	0.000	0.000	0.000	0.174	0.000	0.000	0.000	0.000	0.000	0.000
NA ^a	107100	0.000	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000
Sitka											
1	113411	0.000	0.002	0.000	0.002	0.000	0.122	0.099	0.061	0.071	0.067
2	113415	0.015	0.005	0.003	0.003	0.000	0.097	0.011	0.032	0.020	0.003
3	113416	0.028	0.022	0.040	0.018	0.013	0.206	0.245	0.214	0.240	0.252
4	113414	0.000	0.002	0.000	0.001	0.001	0.019	0.033	0.054	0.012	0.030
5	113413	0.000	0.000	0.000	0.000	0.002	0.012	0.008	0.008	0.000	0.019
6	113621	0.003	0.001	0.000	0.002	0.000	0.007	0.000	0.003	0.000	0.000
7	113430	0.000	0.000	0.001	0.001	0.000	0.006	0.014	0.039	0.039	0.019
8	113412	0.000	0.000	0.002	0.002	0.001	0.088	0.168	0.227	0.118	0.155
9	113450	0.501	0.354	0.320	0.361	0.380	0.245	0.113	0.136	0.119	0.105
10	113311	0.052	0.202	0.277	0.220	0.172	0.066	0.134	0.040	0.168	0.122
11	113370	0.000	0.001	0.001	0.003	0.001	0.045	0.002	0.035	0.018	0.005
13	113611	0.026	0.016	0.025	0.065	0.124	0.013	0.020	0.000	0.031	0.017
14	113417	0.303	0.352	0.286	0.226	0.183	0.031	0.098	0.132	0.108	0.084
15	113630	0.005	0.002	0.001	0.006	0.005	0.004	0.000	0.000	0.016	0.004
16	113660	0.000	0.000	0.000	0.000	0.001	0.007	0.000	0.005	0.000	0.000
17	113313	0.000	0.000	0.001	0.000	0.000	0.005	0.008	0.000	0.000	0.000
18	113622	0.000	0.001	0.001	0.007	0.003	0.007	0.037	0.008	0.003	0.016
96	113612	0.005	0.003	0.009	0.012	0.008	0.000	0.000	0.000	0.005	0.000
97	113550	0.013	0.000	0.000	0.004	0.001	0.007	0.000	0.000	0.003	0.000
98	113312	0.000	0.029	0.012	0.025	0.025	0.000	0.000	0.000	0.006	0.023
99	NA ^a	0.047	0.007	0.019	0.043	0.078	0.014	0.011	0.006	0.024	0.080
Juneau											
1	115200	0.000	0.000	0.010	0.000	0.000	0.004	0.006	0.010	0.008	0.006
2	115101	0.113	0.109	0.040	0.087	0.029	0.164	0.188	0.113	0.113	0.151
3	115102	0.000	0.043	0.024	0.149	0.007	0.035	0.045	0.041	0.027	0.042
4	111507	0.110	0.035	0.203	0.223	0.077	0.218	0.181	0.243	0.180	0.204
5	111506	0.000	0.000	0.015	0.003	0.046	0.046	0.036	0.065	0.049	0.056
6	111505	0.000	0.012	0.012	0.000	0.014	0.073	0.050	0.081	0.048	0.043

(continued)

Table 9. Page 4 of 5.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Juneau (cont.)											
7	112151	0.010	0.037	0.026	0.034	0.023	0.039	0.025	0.042	0.036	0.048
8	112162	0.091	0.025	0.000	0.000	0.000	0.011	0.016	0.016	0.028	0.014
9	111503	0.000	0.000	0.000	0.000	0.057	0.032	0.014	0.017	0.038	0.022
10	111502	0.000	0.000	0.021	0.000	0.000	0.009	0.003	0.010	0.010	0.006
11	111410	0.000	0.000	0.000	0.000	0.000	0.017	0.009	0.021	0.026	0.011
12	111403	0.000	0.000	0.021	0.042	0.017	0.047	0.085	0.040	0.044	0.054
13	111431	0.000	0.000	0.000	0.000	0.000	0.002	0.007	0.009	0.004	0.003
14	111320	0.000	0.000	0.000	0.000	0.000	0.001	0.010	0.006	0.002	0.007
15	111312	0.000	0.000	0.000	0.000	0.000	0.007	0.006	0.014	0.017	0.008
16	111501	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.005	0.010	0.001
17	111432	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.003	0.000	0.000
18	112161	0.000	0.052	0.000	0.070	0.000	0.014	0.011	0.020	0.014	0.021
19	111401	0.000	0.000	0.000	0.000	0.000	0.006	0.019	0.017	0.015	0.020
20	111402	0.000	0.018	0.000	0.000	0.000	0.003	0.011	0.003	0.000	0.004
21	111504	0.000	0.043	0.015	0.038	0.000	0.029	0.028	0.039	0.036	0.022
22	115103	0.000	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000
23	112153	0.098	0.031	0.031	0.000	0.029	0.005	0.004	0.005	0.007	0.005
24	112152	0.012	0.089	0.008	0.000	0.126	0.038	0.054	0.030	0.034	0.071
25	112140	0.030	0.126	0.031	0.061	0.063	0.017	0.045	0.011	0.009	0.014
26	114250	0.139	0.333	0.201	0.229	0.255	0.052	0.063	0.068	0.072	0.088
27	114270	0.046	0.012	0.074	0.046	0.205	0.028	0.022	0.023	0.059	0.022
28	114231	0.000	0.012	0.000	0.000	0.000	0.004	0.000	0.001	0.001	0.009
29	114232	0.000	0.000	0.000	0.000	0.049	0.003	0.011	0.003	0.000	0.002
30	114700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000
32	112120	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.000
33	112170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000
34	111311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.002	0.004
35	111200	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.018	0.007	0.019
37	114800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.003
53	114211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002
55	113910	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
99	NA ^a	0.352	0.022	0.269	0.000	0.003	0.091	0.051	0.015	0.077	0.014
Elfin Cove											
26	114250	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
27	114270	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
28	114231	0.080	0.080	0.062	0.044	0.051	0.000	0.051	0.008	0.078	0.104
29	114232	0.003	0.020	0.021	0.007	0.000	0.000	0.000	0.035	0.000	0.008
45	114600	0.014	0.006	0.015	0.000	0.000	0.000	0.079	0.031	0.000	0.033
46	114212	0.146	0.154	0.137	0.100	0.082	0.190	0.041	0.073	0.290	0.067
47	116110	0.004	0.010	0.007	0.004	0.015	0.000	0.051	0.047	0.000	0.000
50	116140	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
51	114400	0.002	0.005	0.017	0.008	0.000	0.127	0.000	0.020	0.066	0.000
52	114500	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.007	0.000
53	114211	0.484	0.382	0.411	0.551	0.504	0.683	0.580	0.330	0.362	0.496
54	113940	0.055	0.048	0.067	0.013	0.026	0.000	0.000	0.134	0.034	0.044
55	113910	0.199	0.291	0.256	0.260	0.307	0.000	0.179	0.322	0.157	0.242
56	113930	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	113950	0.011	0.002	0.001	0.003	0.000	0.000	0.000	0.006	0.000	0.000

(continued)

Table 9. Page 5 of 5.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Elfin Cove (cont.)											
60	113920	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
61	154000	0.000	0.000	0.004	0.008	0.010	0.000	0.000	0.000	0.000	0.000
Gustavus											
25	112140	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	114250	0.000	0.006	0.002	0.002	0.000	0.008	0.011	0.004	0.002	0.000
27	114270	0.000	0.000	0.003	0.000	0.000	0.011	0.000	0.020	0.000	0.000
28	114231	0.271	0.276	0.241	0.197	0.135	0.391	0.477	0.436	0.227	0.274
29	114232	0.172	0.634	0.589	0.562	0.641	0.359	0.482	0.446	0.396	0.355
30	114700	0.000	0.015	0.027	0.142	0.166	0.018	0.000	0.056	0.359	0.346
31	112130	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	114800	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.000	0.000
41	114740	0.000	0.004	0.049	0.000	0.000	0.000	0.000	0.007	0.000	0.000
42	114730	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	114600	0.000	0.000	0.027	0.000	0.000	0.000	0.000	0.024	0.001	0.000
46	114212	0.519	0.042	0.002	0.049	0.008	0.192	0.030	0.004	0.010	0.013
47	116110	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.020	0.000	0.000
48	116120	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	116130	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	114400	0.000	0.000	0.003	0.005	0.001	0.003	0.000	0.000	0.000	0.000
52	114500	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	114211	0.012	0.011	0.052	0.035	0.030	0.005	0.000	0.006	0.003	0.008
54	113940	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	113910	0.010	0.009	0.002	0.006	0.019	0.000	0.000	0.000	0.002	0.005
56	113930	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	113950	0.007	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000

^a NA – Area outside of typical marine fishery boundary for the particular port.

Table 10. Spatial distribution of halibut harvest in Area 2C charter and private recreational fisheries, 2003-2007. Values are the estimated proportion of halibut harvest (numbers of fish) in each ADF&G statistical area. Table cells are shaded if the proportion ≥ 0.10 to highlight major statistical areas.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Ketchikan											
1	101900	0.044	0.085	0.012	0.018	0.015	0.087	0.085	0.125	0.062	0.139
2	101800	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.000	0.002
3	101850	0.020	0.000	0.013	0.015	0.002	0.025	0.020	0.043	0.047	0.048
4	102501	0.060	0.146	0.101	0.011	0.055	0.143	0.080	0.158	0.099	0.096
5	101290	0.093	0.034	0.046	0.044	0.073	0.244	0.181	0.208	0.226	0.255
6	101472	0.000	0.000	0.010	0.003	0.004	0.003	0.032	0.022	0.010	0.009
7	101270	0.004	0.003	0.016	0.054	0.013	0.035	0.100	0.097	0.093	0.064
8	101452	0.000	0.012	0.011	0.009	0.006	0.012	0.006	0.033	0.013	0.018
9	101440	0.000	0.000	0.000	0.008	0.004	0.004	0.003	0.000	0.000	0.001
10	101451	0.002	0.003	0.023	0.023	0.018	0.007	0.015	0.003	0.005	0.001
11	101412	0.000	0.024	0.022	0.060	0.004	0.033	0.071	0.050	0.040	0.028
12	101411	0.088	0.064	0.008	0.084	0.008	0.137	0.103	0.044	0.154	0.062
13	101460	0.000	0.000	0.000	0.002	0.000	0.003	0.000	0.002	0.000	0.000
14	101471	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.008	0.000	0.002
16	101950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
17	101400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
18	101480	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	101530	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.002	0.000
20	102801	0.007	0.018	0.004	0.003	0.014	0.014	0.021	0.013	0.014	0.004
21	102802	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.009	0.000	0.008
22	101510	0.002	0.003	0.000	0.000	0.001	0.000	0.000	0.006	0.000	0.004
23	102100	0.115	0.207	0.139	0.240	0.134	0.059	0.033	0.051	0.035	0.034
24	101250	0.144	0.085	0.186	0.195	0.131	0.030	0.096	0.057	0.057	0.060
25	101230	0.066	0.052	0.008	0.024	0.002	0.069	0.035	0.010	0.037	0.018
26	101210	0.325	0.250	0.370	0.189	0.443	0.076	0.090	0.029	0.064	0.103
27	101110	0.000	0.000	0.000	0.018	0.012	0.001	0.000	0.007	0.000	0.003
28	102200	0.000	0.000	0.011	0.000	0.032	0.003	0.002	0.001	0.008	0.009
29	102700	0.020	0.009	0.000	0.000	0.012	0.000	0.021	0.007	0.012	0.016
30	101430	0.000	0.003	0.000	0.000	0.000	0.000	0.003	0.003	0.004	0.000
31	102502	0.000	0.000	0.005	0.000	0.000	0.012	0.000	0.000	0.001	0.003
99	NA ^a	0.009	0.000	0.014	0.002	0.012	0.001	0.000	0.012	0.017	0.015
Craig											
1	103600	0.017	0.002	0.002	0.001	0.000	0.036	0.023	0.108	0.145	0.030
2	103500	0.020	0.000	0.018	0.012	0.068	0.027	0.045	0.113	0.200	0.173
3	103700	0.015	0.051	0.092	0.077	0.064	0.047	0.095	0.143	0.104	0.091
4	103800	0.000	0.013	0.005	0.000	0.010	0.000	0.008	0.002	0.033	0.003
5	104400	0.464	0.500	0.738	0.676	0.668	0.432	0.557	0.462	0.440	0.497
6	104350	0.425	0.386	0.081	0.063	0.056	0.387	0.247	0.102	0.033	0.129
7	104300	0.059	0.049	0.065	0.016	0.025	0.048	0.016	0.065	0.016	0.021
8	104200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	104500	0.000	0.000	0.000	0.000	0.029	0.000	0.000	0.000	0.000	0.005
10	103900	0.000	0.000	0.000	0.033	0.015	0.004	0.000	0.002	0.008	0.000
11	103400	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.004	0.002	0.002
12	103300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	103210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
16	105500	0.000	0.000	0.000	0.110	0.064	0.015	0.008	0.000	0.010	0.036

(continued)

Table 10. Page 2 of 5.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Craig (cont.)											
17	105100	0.000	0.000	0.000	0.012	0.000	0.001	0.000	0.000	0.004	0.000
99	NA ^a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.011
Klawock											
1	103600	0.013	0.000	0.000	0.000	0.000	0.011	0.018	0.034	0.000	0.033
2	103500	0.000	0.024	0.020	0.000	0.030	0.005	0.063	0.142	0.306	0.264
3	103700	0.066	0.046	0.005	0.029	0.030	0.087	0.099	0.093	0.043	0.088
4	103800	0.000	0.048	0.014	0.000	0.012	0.000	0.031	0.078	0.043	0.003
5	104400	0.468	0.467	0.699	0.682	0.771	0.355	0.664	0.525	0.530	0.535
6	104350	0.433	0.370	0.216	0.050	0.084	0.541	0.099	0.083	0.000	0.064
7	104300	0.000	0.045	0.046	0.005	0.062	0.000	0.027	0.005	0.000	0.012
8	104200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	104500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	103900	0.002	0.000	0.000	0.054	0.000	0.000	0.000	0.039	0.064	0.000
11	103400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	103210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	105500	0.018	0.000	0.000	0.180	0.000	0.000	0.000	0.000	0.014	0.000
Petersburg											
1	106443	0.000	0.000	0.000	0.000	0.000	0.007	0.019	0.010	0.008	0.001
2	106441	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007
3	108500	0.001	0.007	0.000	0.000	0.000	0.075	0.024	0.003	0.000	0.000
4	108600	0.000	0.000	0.001	0.002	0.099	0.039	0.111	0.202	0.180	0.140
5	110130	0.047	0.046	0.000	0.002	0.019	0.061	0.049	0.012	0.015	0.020
6	106430	0.000	0.000	0.000	0.000	0.006	0.006	0.000	0.001	0.040	0.014
7	106441	0.001	0.005	0.000	0.024	0.014	0.001	0.009	0.023	0.023	0.007
8	110160	0.836	0.697	0.544	0.612	0.573	0.538	0.447	0.362	0.314	0.432
9	106412	0.003	0.039	0.134	0.164	0.139	0.015	0.054	0.057	0.124	0.047
12	108403	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.005	0.000
13	108402	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.001	0.000	0.000
14	108200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	106442	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.003	0.012	0.009
21	106302	0.047	0.043	0.019	0.062	0.085	0.110	0.055	0.009	0.028	0.078
22	106301	0.000	0.000	0.208	0.013	0.000	0.001	0.006	0.037	0.000	0.000
23	106411	0.056	0.073	0.000	0.009	0.048	0.015	0.015	0.007	0.015	0.006
24	106420	0.001	0.000	0.010	0.004	0.001	0.001	0.069	0.036	0.000	0.026
25	108410	0.001	0.000	0.019	0.006	0.003	0.006	0.018	0.055	0.134	0.077
26	110110	0.000	0.000	0.000	0.000	0.003	0.000	0.006	0.000	0.005	0.004
27	110120	0.000	0.000	0.025	0.011	0.000	0.049	0.067	0.135	0.051	0.056
28	110140	0.000	0.007	0.006	0.000	0.000	0.049	0.031	0.012	0.001	0.000
29	110150	0.000	0.036	0.005	0.028	0.000	0.010	0.011	0.000	0.025	0.000
30	110310	0.000	0.014	0.030	0.054	0.010	0.017	0.003	0.031	0.018	0.068
99	NA ^a	0.000	0.033	0.000	0.006	0.000	0.000	0.005	0.000	0.001	0.009
Wrangell											
3	108500	0.051	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	110130	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	106441	0.000	0.294	0.100	0.000	0.047	0.049	0.000	0.010	0.056	0.046
9	106412	0.077	0.500	0.000	0.173	0.035	0.099	0.321	0.062	0.000	0.017

(continued)

Table 10. Page 3 of 5.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Wrangell (cont.)											
12	108403	0.000	0.000	0.000	0.000	0.000	0.025	0.000	0.010	0.011	0.134
13	108402	0.077	0.088	0.033	0.240	0.059	0.648	0.423	0.216	0.541	0.382
14	108200	0.000	0.000	0.000	0.029	0.082	0.012	0.000	0.000	0.007	0.004
15	108401	0.000	0.000	0.000	0.000	0.000	0.019	0.015	0.000	0.022	0.025
16	107300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.004	0.000
17	107450	0.000	0.000	0.000	0.000	0.000	0.012	0.022	0.000	0.000	0.008
19	108100	0.000	0.000	0.000	0.000	0.000	0.037	0.139	0.093	0.004	0.055
20	107200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.247	0.022	0.008
21	106302	0.462	0.118	0.233	0.067	0.376	0.037	0.058	0.227	0.149	0.239
22	106301	0.256	0.000	0.267	0.038	0.047	0.000	0.000	0.000	0.049	0.000
23	106411	0.000	0.000	0.333	0.038	0.271	0.049	0.000	0.062	0.004	0.046
24	106420	0.077	0.000	0.033	0.029	0.035	0.012	0.022	0.031	0.097	0.029
25	108410	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.004	0.000
31	107400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99	NA ^a	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.030	0.000
NA ^a	105200	0.000	0.000	0.000	0.154	0.000	0.000	0.000	0.000	0.000	0.000
NA ^a	105410	0.000	0.000	0.000	0.192	0.000	0.000	0.000	0.000	0.000	0.000
NA ^a	107100	0.000	0.000	0.000	0.038	0.000	0.000	0.000	0.000	0.000	0.000
Sitka											
1	113411	0.000	0.000	0.000	0.002	0.000	0.050	0.054	0.023	0.017	0.042
2	113415	0.009	0.002	0.003	0.003	0.000	0.041	0.004	0.016	0.008	0.000
3	113416	0.026	0.014	0.033	0.016	0.013	0.242	0.361	0.430	0.404	0.333
4	113414	0.000	0.001	0.002	0.000	0.002	0.007	0.023	0.035	0.016	0.044
5	113413	0.000	0.000	0.002	0.000	0.003	0.014	0.004	0.005	0.004	0.005
6	113621	0.002	0.000	0.000	0.002	0.000	0.011	0.000	0.016	0.002	0.000
7	113430	0.000	0.000	0.001	0.000	0.000	0.000	0.002	0.009	0.039	0.000
8	113412	0.000	0.000	0.002	0.002	0.003	0.005	0.022	0.067	0.062	0.051
9	113450	0.578	0.468	0.458	0.377	0.433	0.445	0.258	0.198	0.144	0.151
10	113311	0.023	0.151	0.208	0.212	0.142	0.036	0.092	0.056	0.136	0.079
11	113370	0.000	0.002	0.001	0.001	0.000	0.018	0.002	0.000	0.000	0.002
13	113611	0.020	0.011	0.029	0.069	0.117	0.032	0.022	0.002	0.035	0.000
14	113417	0.278	0.308	0.204	0.204	0.154	0.068	0.137	0.123	0.115	0.105
15	113630	0.001	0.000	0.000	0.003	0.003	0.005	0.000	0.000	0.004	0.105
16	113660	0.000	0.000	0.000	0.000	0.001	0.009	0.000	0.002	0.000	0.000
17	113313	0.000	0.001	0.001	0.000	0.000	0.000	0.007	0.000	0.000	0.000
18	113622	0.000	0.003	0.003	0.002	0.000	0.011	0.009	0.002	0.000	0.000
96	113612	0.003	0.005	0.010	0.017	0.010	0.000	0.000	0.000	0.000	0.000
97	113550	0.005	0.000	0.000	0.003	0.001	0.007	0.000	0.000	0.002	0.000
98	113312	0.000	0.026	0.011	0.026	0.018	0.000	0.000	0.000	0.012	0.042
99	NA ^a	0.055	0.008	0.031	0.061	0.100	0.002	0.004	0.014	0.002	0.035
Juneau											
1	115200	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.005	0.002	0.001
2	115101	0.096	0.060	0.032	0.072	0.015	0.149	0.142	0.098	0.134	0.147
3	115102	0.000	0.039	0.028	0.179	0.031	0.035	0.040	0.036	0.032	0.032
4	111507	0.102	0.014	0.306	0.251	0.131	0.213	0.168	0.308	0.150	0.181
5	111506	0.000	0.004	0.000	0.015	0.073	0.031	0.030	0.065	0.038	0.048
6	111505	0.000	0.007	0.028	0.008	0.000	0.071	0.060	0.074	0.056	0.045

(continued)

Table 10. Page 4 of 5.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Juneau (cont.)											
7	112151	0.007	0.053	0.046	0.023	0.031	0.029	0.020	0.028	0.043	0.047
8	112162	0.003	0.011	0.004	0.000	0.000	0.012	0.012	0.017	0.042	0.007
9	111503	0.000	0.000	0.000	0.000	0.008	0.021	0.007	0.025	0.017	0.013
10	111502	0.000	0.000	0.021	0.000	0.000	0.003	0.001	0.004	0.005	0.002
11	111410	0.000	0.000	0.000	0.000	0.000	0.007	0.004	0.008	0.016	0.008
12	111403	0.003	0.000	0.018	0.030	0.012	0.019	0.057	0.027	0.045	0.049
13	111431	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.003	0.001
14	111320	0.000	0.000	0.000	0.000	0.000	0.001	0.005	0.004	0.002	0.004
15	111312	0.000	0.000	0.000	0.000	0.000	0.007	0.001	0.008	0.021	0.011
16	111501	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.005	0.001
17	111432	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000
18	112161	0.000	0.060	0.000	0.034	0.000	0.033	0.021	0.023	0.031	0.022
19	111401	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.006	0.010	0.018
20	111402	0.000	0.004	0.000	0.000	0.000	0.001	0.008	0.002	0.000	0.002
21	111504	0.000	0.049	0.014	0.027	0.000	0.019	0.020	0.029	0.025	0.013
22	115103	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	0.000
23	112153	0.143	0.035	0.021	0.000	0.058	0.005	0.003	0.006	0.007	0.007
24	112152	0.014	0.084	0.028	0.000	0.143	0.058	0.063	0.032	0.041	0.106
25	112140	0.038	0.130	0.007	0.034	0.054	0.027	0.054	0.009	0.007	0.014
26	114250	0.177	0.379	0.204	0.247	0.278	0.096	0.095	0.113	0.094	0.133
27	114270	0.075	0.039	0.158	0.057	0.131	0.058	0.068	0.029	0.080	0.037
28	114231	0.000	0.028	0.000	0.000	0.000	0.008	0.000	0.006	0.001	0.003
29	114232	0.000	0.000	0.000	0.000	0.035	0.004	0.014	0.003	0.000	0.001
30	114700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000
32	112120	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.003	0.000	0.000
33	112170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000
34	111311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.001	0.006
35	111200	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.010	0.004	0.015
37	114800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.001
53	114211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
55	113910	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
99	NA ^a	0.341	0.007	0.085	0.000	0.000	0.083	0.094	0.008	0.071	0.023
Elfin Cove											
26	114250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	114270	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
28	114231	0.080	0.083	0.082	0.034	0.068	0.000	0.031	0.000	0.111	0.122
29	114232	0.005	0.018	0.035	0.005	0.000	0.000	0.000	0.063	0.000	0.015
45	114600	0.014	0.006	0.008	0.000	0.000	0.000	0.046	0.000	0.000	0.000
46	114212	0.155	0.153	0.109	0.084	0.045	0.444	0.046	0.010	0.190	0.071
47	116110	0.003	0.005	0.007	0.003	0.017	0.000	0.108	0.042	0.000	0.000
50	116140	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000
51	114400	0.002	0.007	0.011	0.007	0.001	0.111	0.000	0.031	0.078	0.000
52	114500	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.020	0.000
53	114211	0.379	0.318	0.341	0.403	0.409	0.444	0.646	0.344	0.268	0.393
54	113940	0.060	0.058	0.057	0.009	0.021	0.000	0.000	0.198	0.026	0.031
55	113910	0.300	0.350	0.343	0.443	0.424	0.000	0.123	0.313	0.301	0.362
56	113930	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	113950	0.003	0.001	0.000	0.084	0.000	0.000	0.000	0.007	0.000	0.000

(continued)

Table 10. Page 5 of 5.

Port and Creel Area	StatArea	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Elfin Cove (cont.)											
60	113920	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
61	154000	0.000	0.000	0.006	0.011	0.010	0.000	0.000	0.000	0.000	0.000
Gustavus											
25	112140	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	114250	0.001	0.000	0.001	0.000	0.000	0.009	0.005	0.000	0.002	0.016
27	114270	0.000	0.000	0.005	0.000	0.000	0.017	0.000	0.021	0.000	0.000
28	114231	0.283	0.315	0.268	0.212	0.136	0.388	0.419	0.398	0.270	0.253
29	114232	0.188	0.636	0.588	0.561	0.678	0.335	0.558	0.487	0.370	0.403
30	114700	0.001	0.010	0.021	0.134	0.148	0.010	0.000	0.046	0.347	0.320
31	112130	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	114800	0.000	0.000	0.001	0.001	0.000	0.004	0.000	0.000	0.000	0.000
41	114740	0.000	0.002	0.055	0.000	0.000	0.000	0.000	0.007	0.000	0.000
42	114730	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	114600	0.001	0.000	0.027	0.000	0.000	0.000	0.000	0.032	0.002	0.000
46	114212	0.514	0.033	0.001	0.062	0.009	0.226	0.018	0.000	0.009	0.008
47	116110	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.021	0.000	0.000
48	116120	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	116130	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	114400	0.000	0.000	0.008	0.003	0.000	0.004	0.000	0.000	0.000	0.000
52	114500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	114211	0.005	0.003	0.019	0.025	0.018	0.004	0.000	0.009	0.000	0.000
54	113940	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	113910	0.000	0.000	0.003	0.000	0.011	0.004	0.000	0.000	0.000	0.000
56	113930	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	113950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

^a NA – Area outside of typical marine fishery boundary for the particular port.

Table 11. Spatial distribution of bottomfishing effort in Area 3A charter and private recreational fisheries, 2003-2007. Values are the estimated proportion of angler-days in each ADF&G statistical area (except angler-hours at Yakutat). Table cells are shaded if the proportion ≥ 0.10 to highlight major statistical areas.

Port	Stat Area	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
CCI ^a	515903	0.003	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
	515906	0.000	0.000	0.000	0.000	0.002	0.000	0.005	0.000	0.000	0.000
	515907	0.004	0.006	0.012	0.000	0.000	0.000	0.004	0.000	0.000	0.000
	515908	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
	515931	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.013	0.000	0.000
	515936	0.000	0.000	0.003	0.003	0.000	0.000	0.000	0.006	0.008	0.004
	515937	0.002	0.012	0.025	0.002	0.000	0.072	0.055	0.077	0.006	0.029
	515938	0.012	0.032	0.011	0.013	0.026	0.096	0.173	0.309	0.214	0.194
	515939	0.010	0.010	0.011	0.017	0.018	0.221	0.143	0.185	0.090	0.161
	516001	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.003	0.014	0.003
	516002	0.000	0.000	0.008	0.004	0.000	0.000	0.012	0.011	0.010	0.003
	525902	0.003	0.012	0.007	0.000	0.003	0.000	0.000	0.000	0.000	0.000
	525931	0.966	0.923	0.905	0.959	0.948	0.611	0.605	0.397	0.642	0.598
	526002	0.000	0.004	0.012	0.003	0.000	0.000	0.004	0.000	0.018	0.009
Homer	505832	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	505903	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	515831	0.003	0.005	0.014	0.000	0.003	0.000	0.000	0.000	0.000	0.000
	515832	0.008	0.005	0.038	0.000	0.016	0.000	0.000	0.000	0.000	0.000
	515901	0.003	0.008	0.001	0.000	0.005	0.000	0.000	0.000	0.004	0.000
	515902	0.000	0.002	0.007	0.000	0.000	0.000	0.000	0.000	0.003	0.000
	515903	0.064	0.049	0.032	0.033	0.066	0.000	0.007	0.000	0.000	0.011
	515904	0.015	0.011	0.009	0.016	0.002	0.005	0.000	0.000	0.003	0.004
	515905	0.212	0.036	0.073	0.036	0.048	0.052	0.005	0.000	0.003	0.006
	515906	0.050	0.035	0.018	0.063	0.052	0.011	0.000	0.000	0.005	0.006
	515907	0.062	0.064	0.069	0.028	0.066	0.074	0.131	0.142	0.079	0.119
	515908	0.002	0.000	0.009	0.002	0.000	0.039	0.030	0.045	0.031	0.026
	515931	0.000	0.001	0.004	0.002	0.000	0.004	0.004	0.004	0.008	0.004
	515932	0.001	0.001	0.002	0.000	0.006	0.022	0.038	0.023	0.040	0.030
	515933	0.009	0.000	0.003	0.000	0.006	0.078	0.030	0.054	0.056	0.031
	515934	0.000	0.000	0.001	0.000	0.000	0.000	0.006	0.002	0.000	0.000
	515935	0.005	0.005	0.004	0.022	0.002	0.121	0.076	0.066	0.086	0.044
	515936	0.055	0.009	0.023	0.066	0.041	0.134	0.152	0.155	0.206	0.192
	515937	0.020	0.023	0.053	0.085	0.063	0.071	0.100	0.150	0.144	0.156
	515938	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
	515939	0.000	0.000	0.000	0.000	0.002	0.000	0.006	0.002	0.003	0.000
	525832	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.015	0.000	0.000
	525834	0.019	0.026	0.035	0.016	0.034	0.004	0.000	0.000	0.000	0.000
	525835	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	525836	0.103	0.090	0.080	0.025	0.036	0.000	0.000	0.007	0.000	0.000
	525837	0.047	0.006	0.004	0.002	0.014	0.000	0.000	0.000	0.000	0.000
	525901	0.049	0.048	0.063	0.153	0.069	0.090	0.052	0.086	0.085	0.082
	525902	0.201	0.346	0.323	0.301	0.326	0.125	0.197	0.082	0.106	0.142
	525931	0.071	0.223	0.124	0.131	0.136	0.172	0.167	0.167	0.138	0.142
	525932	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	535901	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	535906	0.000	0.000	0.000	0.016	0.003	0.000	0.000	0.000	0.000	0.000
	535931	0.000	0.000	0.000	0.004	0.003	0.000	0.000	0.000	0.000	0.000
	535932	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000

(continued)

Table 11. Page 2 of 4.

Port	Stat Area	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Kodiak	515700	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	515730	0.000	0.004	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000
	515801	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000
	525701	0.159	0.097	0.053	0.180	0.239	0.015	0.004	0.004	0.011	0.005
	525702	0.008	0.006	0.033	0.044	0.039	0.000	0.000	0.000	0.000	0.000
	525703	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	525731	0.029	0.033	0.098	0.254	0.078	0.040	0.018	0.036	0.063	0.448
	525732	0.077	0.019	0.039	0.010	0.000	0.219	0.199	0.274	0.054	0.004
	525733	0.705	0.817	0.778	0.492	0.569	0.720	0.768	0.642	0.872	0.543
	525803	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	525805	0.018	0.000	0.000	0.004	0.000	0.006	0.002	0.035	0.000	0.000
	525806	0.000	0.002	0.000	0.000	0.059	0.000	0.009	0.002	0.000	0.000
	525807	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.006	0.000	0.000
	535734	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000
Seward	475931	0.040	0.058	0.024	0.045	0.039	0.044	0.003	0.000	0.009	0.000
	475932	0.030	0.031	0.007	0.033	0.035	0.000	0.006	0.020	0.012	0.007
	475933	0.019	0.018	0.023	0.091	0.040	0.000	0.000	0.000	0.000	0.014
	475934	0.165	0.233	0.012	0.116	0.180	0.031	0.034	0.008	0.009	0.077
	476004	0.000	0.004	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000
	485931	0.080	0.052	0.056	0.032	0.028	0.004	0.029	0.032	0.000	0.000
	485932	0.278	0.149	0.242	0.226	0.244	0.068	0.036	0.000	0.134	0.030
	485933	0.011	0.019	0.037	0.011	0.010	0.048	0.024	0.008	0.026	0.014
	485934	0.009	0.015	0.020	0.000	0.003	0.000	0.005	0.000	0.009	0.000
	485935	0.061	0.071	0.083	0.111	0.126	0.083	0.093	0.102	0.035	0.049
	486001	0.004	0.010	0.000	0.016	0.014	0.000	0.000	0.000	0.000	0.000
	486002	0.003	0.000	0.004	0.000	0.000	0.009	0.000	0.000	0.000	0.012
	495901	0.004	0.001	0.015	0.004	0.004	0.000	0.005	0.028	0.000	0.000
	495902	0.010	0.007	0.005	0.003	0.021	0.000	0.000	0.000	0.000	0.000
	495931	0.009	0.008	0.013	0.000	0.005	0.000	0.010	0.000	0.000	0.000
	495932	0.113	0.112	0.127	0.114	0.063	0.375	0.342	0.232	0.271	0.210
	495933	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.024	0.005	0.007
	495934	0.030	0.038	0.035	0.003	0.029	0.037	0.020	0.000	0.014	0.026
	495935	0.011	0.013	0.047	0.014	0.000	0.000	0.002	0.000	0.000	0.009
	495936	0.015	0.012	0.005	0.012	0.008	0.007	0.000	0.012	0.012	0.023
	495937	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.009	0.000
	495938	0.053	0.051	0.069	0.040	0.053	0.248	0.333	0.445	0.401	0.400
	495939	0.005	0.024	0.000	0.011	0.000	0.000	0.003	0.000	0.000	0.000
	496001	0.000	0.003	0.005	0.000	0.004	0.000	0.003	0.008	0.000	0.023
	496002	0.000	0.000	0.000	0.002	0.000	0.039	0.014	0.035	0.052	0.049
Valdez	505901	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007
	505905	0.000	0.013	0.000	0.006	0.004	0.000	0.000	0.000	0.000	0.042
	505906	0.000	0.000	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000
	505907	0.008	0.007	0.034	0.009	0.064	0.000	0.020	0.000	0.000	0.000
	505909	0.008	0.009	0.044	0.029	0.000	0.000	0.000	0.000	0.000	0.000
	505931	0.000	0.000	0.005	0.000	0.008	0.000	0.000	0.000	0.000	0.000
	505932	0.035	0.040	0.071	0.051	0.020	0.000	0.018	0.047	0.000	0.000
	505933	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	456032	0.000	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000
	465902	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

(continued)

Table 11. Page 3 of 4.

Port	Stat Area	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Valdez (cont.)	465903	0.000	0.000	0.005	0.000	0.013	0.000	0.000	0.000	0.000	0.000
	465931	0.000	0.000	0.000	0.000	0.038	0.000	0.000	0.000	0.000	0.000
	465932	0.130	0.167	0.184	0.126	0.164	0.000	0.000	0.000	0.000	0.000
	466001	0.008	0.003	0.014	0.032	0.013	0.000	0.000	0.000	0.000	0.012
	466002	0.054	0.092	0.090	0.140	0.181	0.009	0.020	0.012	0.000	0.000
	466003	0.284	0.107	0.093	0.131	0.113	0.095	0.095	0.069	0.075	0.242
	466004	0.169	0.179	0.166	0.025	0.087	0.061	0.077	0.037	0.000	0.027
	466005	0.016	0.016	0.023	0.000	0.013	0.000	0.006	0.005	0.000	0.000
	466031	0.000	0.011	0.013	0.024	0.013	0.021	0.030	0.000	0.025	0.027
	466032	0.006	0.006	0.023	0.020	0.000	0.130	0.171	0.179	0.132	0.200
	466033	0.006	0.015	0.000	0.025	0.079	0.253	0.184	0.263	0.348	0.236
	466034	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	466100	0.006	0.001	0.010	0.000	0.000	0.209	0.178	0.119	0.191	0.012
	475932	0.133	0.122	0.073	0.143	0.202	0.000	0.011	0.000	0.000	0.042
	475933	0.000	0.000	0.000	0.008	0.000	0.030	0.000	0.000	0.000	0.000
	476001	0.000	0.012	0.015	0.012	0.000	0.000	0.000	0.000	0.000	0.000
	476002	0.028	0.040	0.068	0.022	0.051	0.000	0.006	0.000	0.000	0.009
	476003	0.029	0.047	0.027	0.129	0.000	0.000	0.006	0.000	0.000	0.000
	476004	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	476005	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000
	476006	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000
	476007	0.006	0.014	0.010	0.034	0.000	0.012	0.000	0.015	0.000	0.000
	476008	0.074	0.017	0.011	0.055	0.034	0.018	0.000	0.015	0.000	0.024
	476009	0.006	0.042	0.083	0.034	0.000	0.000	0.000	0.000	0.000	0.000
	476031	0.023	0.057	0.026	0.000	0.000	0.018	0.066	0.062	0.000	0.012
	476032	0.000	0.000	0.018	0.000	0.000	0.070	0.012	0.032	0.069	0.009
	476033	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000
	476034	0.008	0.020	0.008	0.010	0.000	0.021	0.018	0.062	0.038	0.051
	476035	0.014	0.018	0.036	0.000	0.000	0.039	0.074	0.117	0.072	0.093
	476036	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.012	0.044	0.006
	485932	0.000	0.000	0.000	0.000	0.000	0.006	0.014	0.000	0.000	0.000
	486001	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Whittier	456032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
	466002	0.005	0.065	0.027	0.021	0.000	0.000	0.004	0.019	0.004	0.000
	466003	0.066	0.158	0.164	0.051	0.029	0.004	0.012	0.016	0.004	0.029
	466004	0.015	0.010	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000
	466005	0.043	0.070	0.030	0.000	0.000	0.000	0.009	0.000	0.000	0.000
	466031	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.005	0.000	0.001
	466032	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.003	0.000	0.000
	466033	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000
	475931	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
	475932	0.000	0.006	0.009	0.000	0.000	0.000	0.005	0.002	0.000	0.003
	475933	0.000	0.016	0.006	0.026	0.000	0.000	0.009	0.013	0.007	0.008
	475934	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.015	0.004	0.000
	476002	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	476003	0.052	0.061	0.074	0.277	0.423	0.010	0.021	0.008	0.051	0.048
	476004	0.015	0.014	0.000	0.187	0.120	0.023	0.020	0.019	0.034	0.035
	476005	0.002	0.005	0.011	0.153	0.000	0.018	0.016	0.024	0.003	0.014
	476006	0.030	0.017	0.129	0.021	0.038	0.072	0.037	0.095	0.094	0.113

(continued)

Table 11. Page 4 of 4.

Port	Stat Area	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Whittier (cont.)	476007	0.075	0.032	0.076	0.026	0.019	0.059	0.064	0.024	0.082	0.064
	476008	0.056	0.016	0.052	0.000	0.000	0.026	0.012	0.010	0.013	0.022
	476009	0.015	0.009	0.000	0.030	0.000	0.004	0.018	0.003	0.002	0.002
	476031	0.015	0.043	0.008	0.000	0.000	0.021	0.041	0.012	0.013	0.019
	476032	0.148	0.150	0.117	0.077	0.063	0.101	0.100	0.087	0.075	0.083
	476033	0.241	0.192	0.072	0.043	0.029	0.099	0.158	0.136	0.114	0.141
	476034	0.027	0.000	0.000	0.017	0.000	0.013	0.024	0.024	0.025	0.010
	476035	0.000	0.003	0.000	0.000	0.000	0.009	0.018	0.011	0.007	0.011
	476036	0.006	0.013	0.000	0.000	0.000	0.000	0.003	0.003	0.004	0.020
	476101	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.001	0.000
	476102	0.000	0.009	0.006	0.000	0.000	0.009	0.005	0.002	0.011	0.007
	485931	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.001	0.000
	485932	0.028	0.000	0.052	0.021	0.063	0.015	0.021	0.029	0.020	0.024
	485935	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
	486001	0.028	0.062	0.087	0.051	0.192	0.015	0.009	0.019	0.018	0.013
	486003	0.000	0.000	0.000	0.000	0.000	0.029	0.002	0.010	0.008	0.012
	486004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000
	486005	0.014	0.006	0.000	0.000	0.000	0.033	0.000	0.012	0.010	0.010
	486031	0.000	0.000	0.008	0.000	0.000	0.137	0.080	0.142	0.170	0.116
	486032	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.004	0.003	0.008
	486033	0.067	0.006	0.017	0.000	0.000	0.225	0.236	0.176	0.176	0.149
	486034	0.052	0.031	0.036	0.000	0.024	0.059	0.067	0.071	0.037	0.036
	486100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.004
Yakutat	181500		0.000	0.000	0.000	0.003		0.000	0.000	0.000	0.000
	181602		0.000	0.000	0.000	0.000		0.022	0.000	0.000	0.000
	181603		0.013	0.008	0.064	0.000		0.027	0.007	0.027	0.038
	181604		0.433	0.467	0.370	0.454		0.454	0.273	0.088	0.113
	181605		0.427	0.337	0.344	0.333		0.079	0.036	0.027	0.000
	183101	No data	0.073	0.088	0.016	0.080	No data	0.035	0.009	0.043	0.028
	183102		0.001	0.019	0.009	0.008		0.033	0.002	0.000	0.000
	183103		0.013	0.020	0.000	0.001		0.099	0.009	0.016	0.000
	183104		0.009	0.008	0.011	0.004		0.203	0.581	0.422	0.462
	183105		0.031	0.055	0.183	0.117		0.047	0.084	0.377	0.360
	183202		0.000	0.000	0.003	0.000		0.000	0.000	0.000	0.000

^a CCI = Central Cook Inlet fishery sampled at the Deep Creek and Anchor Point beaches.

Table 12. Spatial distribution of halibut harvest in Area 3A charter and private recreational fisheries, 2003-2007. Values are the estimated proportion of halibut harvest (numbers of fish) in each ADF&G statistical area. Table cells are shaded if the proportion ≥ 0.10 to highlight major statistical areas.

Port	Stat Area	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
CCI ^a	515903	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
	515906	0.000	0.000	0.000	0.000	0.002	0.000	0.006	0.000	0.000	0.000
	515907	0.004	0.004	0.013	0.000	0.000	0.000	0.004	0.000	0.000	0.000
	515908	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	515931	0.000	0.007	0.004	0.000	0.000	0.000	0.000	0.011	0.000	0.000
	515936	0.000	0.000	0.001	0.003	0.000	0.000	0.000	0.003	0.008	0.005
	515937	0.002	0.012	0.024	0.002	0.000	0.064	0.043	0.071	0.005	0.033
	515938	0.012	0.032	0.011	0.013	0.025	0.064	0.147	0.294	0.209	0.185
	515939	0.008	0.009	0.011	0.012	0.015	0.221	0.122	0.176	0.060	0.128
	516001	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.004	0.010	0.004
	516002	0.000	0.000	0.008	0.004	0.000	0.000	0.006	0.002	0.007	0.003
	525902	0.003	0.013	0.007	0.000	0.003	0.000	0.000	0.000	0.000	0.000
	525931	0.971	0.919	0.905	0.963	0.952	0.651	0.666	0.440	0.687	0.636
	526002	0.000	0.005	0.013	0.004	0.000	0.000	0.006	0.000	0.015	0.007
Homer	505832	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	505903	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	515831	0.003	0.006	0.015	0.000	0.003	0.000	0.000	0.000	0.000	0.000
	515832	0.008	0.006	0.035	0.000	0.017	0.000	0.000	0.000	0.000	0.000
	515901	0.001	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.003	0.000
	515902	0.000	0.002	0.006	0.000	0.000	0.000	0.000	0.000	0.001	0.000
	515903	0.067	0.046	0.030	0.025	0.057	0.000	0.005	0.000	0.000	0.011
	515904	0.018	0.007	0.010	0.018	0.002	0.008	0.000	0.000	0.004	0.005
	515905	0.214	0.036	0.070	0.037	0.050	0.064	0.006	0.000	0.000	0.008
	515906	0.050	0.036	0.018	0.062	0.051	0.014	0.000	0.000	0.006	0.004
	515907	0.064	0.063	0.069	0.023	0.071	0.072	0.128	0.146	0.064	0.127
	515908	0.001	0.000	0.009	0.000	0.000	0.011	0.020	0.021	0.018	0.016
	515931	0.000	0.002	0.004	0.000	0.000	0.000	0.005	0.002	0.007	0.004
	515932	0.001	0.000	0.002	0.000	0.004	0.022	0.015	0.013	0.024	0.017
	515933	0.009	0.000	0.004	0.000	0.006	0.031	0.015	0.033	0.038	0.008
	515934	0.000	0.000	0.001	0.000	0.000	0.000	0.007	0.002	0.000	0.000
	515935	0.003	0.003	0.003	0.019	0.001	0.091	0.062	0.034	0.070	0.023
	515936	0.054	0.008	0.021	0.074	0.043	0.123	0.145	0.137	0.199	0.164
	515937	0.020	0.021	0.055	0.092	0.068	0.073	0.117	0.178	0.160	0.180
	515938	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
	515939	0.000	0.000	0.000	0.000	0.002	0.000	0.008	0.003	0.000	0.000
	525832	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.018	0.000	0.000
	525834	0.014	0.014	0.021	0.010	0.020	0.000	0.000	0.000	0.000	0.000
	525835	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	525836	0.104	0.093	0.082	0.026	0.036	0.000	0.000	0.009	0.000	0.000
	525837	0.048	0.007	0.004	0.002	0.015	0.000	0.000	0.000	0.000	0.000
	525901	0.048	0.049	0.065	0.146	0.074	0.111	0.067	0.108	0.109	0.091
	525902	0.204	0.361	0.335	0.315	0.331	0.160	0.224	0.099	0.129	0.168
	525931	0.070	0.229	0.129	0.131	0.143	0.218	0.176	0.195	0.167	0.173
	525932	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	535901	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	535906	0.000	0.000	0.000	0.017	0.003	0.000	0.000	0.000	0.000	0.000
	535931	0.000	0.000	0.000	0.004	0.003	0.000	0.000	0.000	0.000	0.000
	535932	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000

(continued)

Table 12. Page 2 of 4.

Port	Stat Area	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Kodiak	515730	0.000	0.004	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000
	515801	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000
	525701	0.193	0.114	0.052	0.203	0.265	0.025	0.009	0.005	0.018	0.003
	525702	0.011	0.006	0.035	0.044	0.044	0.000	0.000	0.000	0.000	0.000
	525703	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	525731	0.036	0.035	0.093	0.267	0.075	0.053	0.021	0.055	0.075	0.429
	525732	0.064	0.019	0.038	0.006	0.000	0.187	0.165	0.234	0.053	0.010
	525733	0.678	0.808	0.782	0.460	0.536	0.733	0.794	0.656	0.854	0.559
	525803	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	525805	0.017	0.000	0.000	0.005	0.000	0.002	0.001	0.042	0.000	0.000
	525806	0.000	0.002	0.000	0.000	0.064	0.000	0.010	0.004	0.000	0.000
	525807	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000
	535734	0.000	0.000	0.000	0.005	0.017	0.000	0.000	0.000	0.000	0.000
Seward	475931	0.038	0.057	0.026	0.048	0.036	0.073	0.006	0.000	0.023	0.000
	475932	0.024	0.036	0.009	0.029	0.034	0.000	0.014	0.032	0.014	0.013
	475933	0.020	0.018	0.023	0.114	0.044	0.000	0.000	0.000	0.000	0.021
	475934	0.172	0.250	0.015	0.117	0.186	0.050	0.066	0.004	0.014	0.147
	476004	0.000	0.005	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
	485931	0.101	0.058	0.068	0.030	0.033	0.008	0.038	0.055	0.000	0.000
	485932	0.305	0.168	0.281	0.270	0.283	0.154	0.055	0.000	0.162	0.052
	485933	0.013	0.016	0.024	0.001	0.007	0.043	0.039	0.016	0.031	0.021
	485934	0.011	0.018	0.018	0.000	0.004	0.000	0.010	0.000	0.011	0.000
	485935	0.053	0.058	0.093	0.096	0.127	0.121	0.104	0.146	0.057	0.073
	486001	0.004	0.008	0.000	0.019	0.011	0.000	0.000	0.000	0.000	0.000
	486002	0.000	0.000	0.003	0.000	0.000	0.015	0.000	0.000	0.000	0.021
	495901	0.002	0.000	0.014	0.010	0.005	0.000	0.000	0.063	0.000	0.000
	495902	0.012	0.007	0.007	0.004	0.006	0.000	0.000	0.000	0.000	0.000
	495931	0.012	0.010	0.009	0.000	0.005	0.000	0.012	0.000	0.000	0.000
	495932	0.088	0.086	0.082	0.063	0.052	0.345	0.231	0.198	0.202	0.230
	495933	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.009	0.016
	495934	0.020	0.034	0.036	0.004	0.026	0.020	0.034	0.000	0.000	0.037
	495935	0.010	0.005	0.056	0.010	0.000	0.000	0.001	0.000	0.000	0.005
	495936	0.016	0.008	0.006	0.015	0.004	0.005	0.000	0.012	0.011	0.000
	495937	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.003	0.000
	495938	0.041	0.044	0.025	0.026	0.036	0.146	0.291	0.407	0.438	0.262
	495939	0.004	0.030	0.000	0.010	0.000	0.000	0.006	0.000	0.000	0.000
Valdez	496001	0.000	0.003	0.000	0.000	0.000	0.000	0.006	0.004	0.000	0.024
	496002	0.000	0.000	0.001	0.000	0.000	0.018	0.010	0.016	0.026	0.031
	505901	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	505905	0.000	0.016	0.000	0.008	0.005	0.000	0.000	0.000	0.000	0.026
	505906	0.000	0.000	0.013	0.006	0.000	0.000	0.000	0.000	0.000	0.000
	505907	0.010	0.009	0.041	0.013	0.069	0.000	0.039	0.000	0.000	0.000
	505909	0.008	0.010	0.051	0.037	0.000	0.000	0.000	0.000	0.000	0.000
	505931	0.000	0.000	0.006	0.000	0.009	0.000	0.000	0.000	0.000	0.000
	505932	0.036	0.044	0.085	0.056	0.019	0.000	0.040	0.047	0.000	0.021
	505933	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000

(continued)

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Port	Stat Area	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Valdez (cont.)	465903	0.000	0.000	0.005	0.000	0.015	0.000	0.000	0.000	0.000	0.000
	465931	0.000	0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.000	0.000
	465932	0.150	0.197	0.177	0.136	0.161	0.000	0.000	0.000	0.000	0.032
	466001	0.008	0.004	0.015	0.021	0.015	0.000	0.000	0.000	0.000	0.021
	466002	0.056	0.091	0.094	0.157	0.205	0.007	0.029	0.006	0.000	0.000
	466003	0.280	0.093	0.085	0.123	0.124	0.155	0.120	0.080	0.126	0.230
	466004	0.151	0.177	0.177	0.027	0.090	0.094	0.080	0.029	0.000	0.019
	466005	0.011	0.017	0.021	0.000	0.008	0.000	0.012	0.008	0.000	0.000
	466031	0.000	0.010	0.011	0.015	0.015	0.034	0.038	0.000	0.043	0.011
	466032	0.008	0.002	0.027	0.024	0.000	0.184	0.233	0.285	0.267	0.280
	466033	0.008	0.005	0.000	0.019	0.027	0.146	0.159	0.208	0.274	0.164
	466034	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	466100	0.000	0.000	0.002	0.000	0.000	0.054	0.066	0.076	0.079	0.008
	475932	0.147	0.143	0.082	0.186	0.218	0.000	0.006	0.000	0.000	0.029
	475933	0.000	0.000	0.000	0.010	0.000	0.066	0.000	0.000	0.000	0.000
	476001	0.000	0.014	0.017	0.014	0.000	0.000	0.000	0.000	0.000	0.000
	476002	0.032	0.047	0.082	0.025	0.059	0.000	0.004	0.000	0.000	0.016
	476003	0.030	0.038	0.026	0.126	0.000	0.000	0.000	0.000	0.000	0.000
	476004	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	476005	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000
	476006	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000
	476007	0.002	0.012	0.007	0.024	0.000	0.024	0.000	0.006	0.000	0.000
	476008	0.082	0.020	0.015	0.058	0.020	0.028	0.000	0.008	0.000	0.042
	476009	0.002	0.040	0.078	0.031	0.000	0.000	0.000	0.000	0.000	0.000
	476031	0.024	0.045	0.022	0.000	0.000	0.030	0.103	0.082	0.000	0.021
	476032	0.000	0.000	0.017	0.000	0.000	0.116	0.017	0.047	0.083	0.003
	476034	0.001	0.013	0.005	0.004	0.000	0.024	0.017	0.062	0.025	0.061
	476035	0.008	0.020	0.029	0.000	0.000	0.034	0.081	0.087	0.072	0.063
	476036	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.014	0.018	0.000
	485932	0.000	0.000	0.000	0.000	0.000	0.004	0.012	0.000	0.000	0.000
Whittier	466002	0.016	0.071	0.027	0.027	0.000	0.000	0.001	0.011	0.007	0.000
	466003	0.077	0.183	0.212	0.045	0.029	0.022	0.034	0.021	0.021	0.095
	466004	0.020	0.012	0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.000
	466005	0.042	0.069	0.043	0.000	0.000	0.000	0.026	0.000	0.000	0.000
	466031	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.006	0.000	0.000
	466032	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.002	0.000	0.000
	475931	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000
	475932	0.000	0.006	0.014	0.000	0.000	0.000	0.016	0.007	0.000	0.010
	475933	0.000	0.009	0.009	0.030	0.000	0.000	0.023	0.025	0.024	0.027
	475934	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.027	0.014	0.000
	476002	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	476003	0.075	0.072	0.103	0.348	0.500	0.000	0.053	0.022	0.108	0.085
	476004	0.008	0.003	0.000	0.141	0.113	0.027	0.038	0.036	0.064	0.112
	476005	0.001	0.001	0.000	0.087	0.000	0.016	0.025	0.020	0.003	0.019
	476006	0.020	0.016	0.045	0.006	0.000	0.103	0.029	0.148	0.139	0.092
	476007	0.086	0.037	0.071	0.027	0.033	0.052	0.104	0.051	0.079	0.073
	476008	0.058	0.019	0.051	0.000	0.000	0.035	0.027	0.038	0.028	0.069
	476009	0.014	0.009	0.000	0.042	0.000	0.000	0.023	0.006	0.000	0.001
	476031	0.018	0.032	0.012	0.000	0.000	0.054	0.074	0.031	0.018	0.025

(continued)

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Port	Stat Area	Charter					Private				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Whittier (cont.)	476032	0.169	0.165	0.080	0.084	0.033	0.141	0.141	0.092	0.063	0.066
	476033	0.224	0.193	0.073	0.057	0.033	0.128	0.107	0.118	0.088	0.091
	476034	0.035	0.000	0.000	0.018	0.000	0.005	0.015	0.021	0.032	0.016
	476035	0.000	0.000	0.000	0.000	0.000	0.005	0.034	0.016	0.013	0.013
	476036	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.015
	476102	0.000	0.005	0.006	0.000	0.000	0.019	0.001	0.008	0.014	0.011
	485931	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.003	0.000
	485932	0.022	0.000	0.066	0.027	0.021	0.049	0.057	0.047	0.052	0.063
	485935	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
	486001	0.026	0.043	0.108	0.060	0.217	0.054	0.008	0.007	0.030	0.005
	486003	0.000	0.000	0.000	0.000	0.000	0.027	0.000	0.000	0.009	0.004
	486004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
	486005	0.002	0.007	0.000	0.000	0.000	0.052	0.000	0.022	0.007	0.004
	486031	0.000	0.000	0.008	0.000	0.000	0.046	0.042	0.066	0.087	0.049
	486032	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.002	0.002	0.004
	486033	0.052	0.007	0.011	0.000	0.000	0.065	0.075	0.059	0.061	0.028
	486034	0.035	0.027	0.036	0.000	0.021	0.033	0.036	0.065	0.026	0.021
Yakutat	181500		0.000	0.000	0.000	0.003		0.000	0.000	0.000	0.000
	181602		0.000	0.000	0.000	0.000		0.011	0.000	0.000	0.000
	181603		0.010	0.013	0.066	0.000		0.016	0.013	0.037	0.031
	181604		0.415	0.429	0.316	0.437		0.333	0.268	0.037	0.131
	181605		0.437	0.335	0.413	0.356		0.159	0.043	0.015	0.000
	183101	No data	0.088	0.128	0.015	0.074	No data	0.048	0.010	0.011	0.010
	183102		0.002	0.005	0.002	0.005		0.069	0.000	0.000	0.000
	183103		0.015	0.016	0.000	0.001		0.106	0.010	0.004	0.000
	183104		0.003	0.014	0.009	0.001		0.206	0.594	0.507	0.416
	183105		0.031	0.061	0.172	0.122		0.053	0.063	0.388	0.412
	183202		0.000	0.000	0.008	0.000		0.000	0.000	0.000	0.000

^a CCI = Central Cook Inlet fishery sampled at the Deep Creek and Anchor Point beaches.